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### THE HIDDEN STRUCTURES OF INEQUALITY: THE FEDERAL RESERVE AND A CASCADE OF FAILURES

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## INTRODUCTION

The Federal Reserve has asserted, with scant objection in the scholarly literature, that it does not play a role in the problem of economic inequality in the American economy.<sup>1</sup> This claim asserts Fed inequality neutrality, despite the role that Federal Reserve mortgage deregulation played in generating the financial crisis. Moreover, both wealth and income inequality are the highest they have been since 1928. The United States is more unequal than most of its developed world peers.<sup>2</sup> The Pew Research Center found that “the black-white income gap in the US has persisted, with the difference in median household incomes between whites and blacks, going from \$19,000 in 1967 to roughly \$27,000 (measured in 2012 dollars).”<sup>3</sup> After the financial crisis the racial wealth gap has grown dramatically.<sup>4</sup>

The global financial crisis of 2008 and the American inequality crisis converged to provide a rare opportunity to challenge macroeconomic orthodoxies that led to the financial collapse and enlarged preexisting economic inequalities. The fact that housing finance was at the center of the 2008 financial crisis, highlighted yet another problem in the longstanding history of private and governmental racial discrimination in access to housing finance and the resulting economic inequality by race.<sup>5</sup>

In this Article, I challenge the Federal Reserve’s claim of inequality neutrality. This project was sparked when I listened to the entirety<sup>6</sup> of the

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<sup>1</sup> See Nomination of Janet L. Yellen, of California, to be Chairman of the Board of Governors of the Federal Reserve System: Hearing Before the S. Comm. on Banking, Hous., and Urban Affairs, 113th. Cong. 23-35 (2013) [hereinafter Yellen Nomination] (statement of Janet L. Yellen, Member, Board of Governors of the Federal Reserve System) (“Economists have spent a lot of time trying to understand what is responsible for widening inequality. Many of the underlying factors are things that are outside of the Federal Reserve’s ability to address.”). Once she became the Chair of the Board of Governors of the Federal Reserve System, Yellen demonstrated the intellectual curiosity and leadership one might expect from an academic economist. Her speeches to the American Economic Association after her confirmation set a new research agenda for the entire macroeconomics profession. *Interconnectedness and Systemic Risk*, *infra* note 190.

<sup>2</sup> Emmanuel Saez & Gabriel Zucman, *Wealth Inequality in the United States Since 1913: Evidence from Capitalized Income Tax Data*, 131 Q. J. ECON 519, 520–21 (2016).

<sup>3</sup> Drew Desilver, *5 Facts About Economic Inequality*, PEW RESEARCH CTR. (Jan. 7, 2014), <http://www.pewresearch.org/fact-tank/2014/01/07/5-facts-about-economic-inequality/>.

<sup>4</sup> SARAH BURD-SHARPS & REBECCA RASCH, IMPACT OF THE US HOUSING CRISIS ON THE RACIAL WEALTH GAP ACROSS GENERATIONS 9-14 (2015).

<sup>5</sup> EMMA COLEMAN JORDAN & ANGELA P. HARRIS, ECONOMIC JUSTICE: RACE, GENDER, IDENTITY & ECONOMICS 102–03 (2d ed. 2011).

<sup>6</sup> I live tweeted my reactions to the hearings Emma Coleman Jordan. @EconomicJustice, TWITTER (Nov. 14, 2013), <https://twitter.com/economicjustice>.

confirmation hearings of Chairwoman Janet Yellen.<sup>7</sup> I was puzzled by her response to a series of pointed questions from Senators concerned about increasing wage stagnation and economic inequality. Yellen identified globalization, technology, and educational deficits as the source of the inequalities we see. Yellen concluded, “What can the Fed do? We cannot change all of those trends.”<sup>8</sup>

The Federal Reserve in its role as financial regulator was a major cause of the mortgage securities financial crisis. The Fed contributed to inequality in three significant ways. First, they contributed through inaction. The reduction in oversight of origination practices for home mortgage lending is widely acknowledged to be a cause of the financial crisis.<sup>9</sup> The Federal Reserve was the one entity with the power to impose responsible qualification standards for home loans. It failed to exercise the power it had.<sup>10</sup>

The Fed did not reign in subprime lending when it became a rapidly growing segment of the market for mortgages and when the Fed was the only federal regulator with authority to do so.<sup>11</sup> As the subprime loan origination and distribution underwriting standards deteriorated, with abundant evidence of pervasive racial discrimination, the Fed did not intervene. Subprime mortgages were disproportionately sold to people of color.<sup>12</sup> Borrowers in minority

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<sup>7</sup> Yellen Nomination, *supra* note 1, at 4-84.

<sup>8</sup> *Id.* at 35. To be fair, Chairwoman Yellen has a strong record of leadership on unemployment and the potential impact thereof: “Dr. Yellen’s nomination is especially timely as our nation struggles with high unemployment in the wake of the Great Recession. She has devoted a large portion of her professional and academic career to studying the labor market, unemployment, monetary policy, and the economy.” *Id.* at 1 (opening statement of Sen. Tim Johnson, Chairman, S. Comm on Banking, Hous., and Urban Affairs).

<sup>9</sup> The Financial Crisis Inquiry Commission (FCIC) concluded “Widespread failures in financial regulation and supervision proved devastating to the stability of the nation’s financial markets.” FIN. CRISIS INQUIRY COMM’N, THE FINANCIAL CRISIS INQUIRY REPORT: FINAL REPORT OF THE NATIONAL COMMISSION ON THE CAUSES OF THE FINANCIAL AND ECONOMIC CRISIS IN THE UNITED STATES xviii (2011), [http://fcic-static.law.stanford.edu/cdn\\_media/fcic-reports/fcic\\_final\\_report\\_full.pdf](http://fcic-static.law.stanford.edu/cdn_media/fcic-reports/fcic_final_report_full.pdf) [hereinafter FINANCIAL CRISIS INQUIRY REPORT].

<sup>10</sup> *Id.* at xvii.

<sup>11</sup> The Financial Crisis Inquiry Commission found that “the prime example is the Federal Reserve’s pivotal failure to stem the flow of toxic mortgages, which it could have done by setting prudent mortgage-lending standards. The Federal Reserve was the one entity empowered to do so and it did not.” *Id.*

<sup>12</sup> See DEBBIE GRUENSTEIN BOCIAN, KEITH S. ERNST & WEI LI, CTR. FOR RESPONSIBLE LENDING, UNFAIR LENDING: THE EFFECT OF RACE AND ETHNICITY ON THE PRICE OF SUBPRIME MORTGAGES 14-19 (2006) [hereinafter UNFAIR LENDING] (analyzing 50,000 mortgages and revealing statistically significant disparities between minority borrowers and white borrowers).

neighborhoods faced greater odds of receiving a subprime prepayment penalty by a statistically significant margin.<sup>13</sup> The Fed disregarded evidence that African Americans were one-third and Latinos were 45% more likely to get a high-priced loan than white borrowers with the same credit score.<sup>14</sup> The Fed failed to intervene when it received persistent reports of racial steering by unregulated brokers. The record of racial steering by the nation's largest banks is incontrovertible. The Department of Justice settlement of racial steering cases against the largest bank and the largest independent mortgage broker provides ample documentation of the widespread nature of this problem.<sup>15</sup>

Second, the Fed undertook a series of deregulatory actions that led to the crisis and exacerbated preexisting economic inequalities. The Fed's program of aggressive deregulation permitted banks to shift mortgage lending off-balance sheet, and thus evade the safety net provided by regulated capital cushions. This, in turn, opened the door to the development of the unregulated shadow banking<sup>16</sup> system dependent on high leverage as the instability associated with leverage. This sector lacked transparency to permit monitoring the size of its cumulative balance sheet and interconnections among its counter parties. Shadow banks provided short term financing for a daisy chain of origination and distribution channels. Unregulated brokers became a major source of new subprime mortgages. Many of these brokers relied on discriminatory racial steering practices to generate a large volume of high cost subprime loans with features that rendered them unsustainable for the low-income borrowers to whom they were directed. The Fed played the lead role in weakening the financial system by approving the off-balance-sheet path for complex structured financial products that evaded the capital requirements applicable to formal banks. The Fed directly approved double dipping, tax-advantaged capital dilution elements of Bank Holding Company business plans that increased systemic risk.<sup>17</sup> The

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<sup>13</sup> DEBBIE GRUENSTEIN BOCIAN & RICHARD ZHAI, CTR. FOR RESPONSIBLE LENDING, BORROWERS IN HIGHER MINORITY NEIGHBORHOODS MORE LIKELY TO RECEIVE PREPAYMENT PENALTIES 1 (2005).

<sup>14</sup> UNFAIR LENDING, *supra* note 12, at 14, 16–19.

<sup>15</sup> The DOJ announced that “Wells Fargo had also systematically placed African-American and Hispanic Latino borrowers in subprime loans, while placing similarly-qualified white borrowers in prime loans.” U.S. DEP’T OF JUST., THE CIVIL RIGHTS DIVISION’S ACCOMPLISHMENTS 2009–2012 23 (2013), <https://www.justice.gov/crt/us-department-justice-civil-rights-division-accomplishments-2009-2012>.

<sup>16</sup> The term, usually attributed to Paul McCulley, who first used it at a meeting of central bankers attending the annual Jackson Hole retreat in 2007, refers to a system of credit intermediation involving entities and activities outside the regular banking system. *See generally* Laura E. Kores, *What is Shadow Banking?* 50 FIN. & DEV. 42 (2013).

<sup>17</sup> *See* Kim E. Lawry, Todd G. Eich & J. Michelle Grotts, Fed. Deposit Ins. Corp., *Trust Preferred Securities and the Capital Strength of Banking Organizations*, 7 SUPERVISORY INSIGHTS 3, 3–6

Fed's bank deregulatory policies, listed above, contributed to increasing wealth inequality. The immediate cumulative impact of these policies can be seen in the decline of household net worth, which fell \$16 trillion, or 24% from the third quarter 2007 to first quarter 2009.<sup>18</sup>

The Pew Research Center found that the portrait of declining wealth was unequal among racial groups. During the crisis, African-Americans experienced a 53% decline and Hispanic a 66% decline compared to a 16% decline for white households.<sup>19</sup> There was a significant racial difference in wealth recovery after the Crisis. Pew found that from 2010 to 2013, the median wealth of white households increased from \$138,600 to \$141,900, or by 2.4%. By contrast, the median wealth of black households fell 33.7%, from \$16,600 in 2010 to \$11,000 in 2013. Among Hispanics, median wealth decreased by 14.3%, from \$16,000 to \$13,700. For all families—white, black and Hispanic—median wealth is still less than its pre-recession level.<sup>20</sup>

Third, the Fed contributed to the problem of inequality by failing to understand that the unregulated, structured finance pipeline to off-balance-sheet securitizations allowed the financial sector to multiply fees and maximize profits. In fact, the unregulated financial sector surged dramatically accounting for 29% of all profits in the economy,<sup>21</sup> while the middle and bottom of the wealth and income scale absorbed the losses resulting from this economic disaster.

Perhaps most distressingly, once the crisis hit in September 2008, the Fed adopted an incoherent application of the principle of moral hazard when it provided \$12.8 trillion of emergency assistance to shore up the unregulated

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(2010) [hereinafter FDIC SUPERVISORY INSIGHTS] (providing the Federal Deposit Insurance Corporation's criticisms of the Federal Reserve's decision to allow Bank Holding Companies, regulated by the Federal Reserve, to treat Trusted Preferred Securities issued by those Companies as Tier 1 Capital). See generally discussion of "TruPS Regulatory Arbitrage Frenzy," *infra* note 18.

<sup>18</sup> Tyler Atkinson, David Luttrell & Harvey Rosenblum, *How Bad Was It? The Costs and Consequences of the 2007–09 Financial Crisis*, in 10 FED. RESERVE BANK OF DALLAS, STAFF PAPERS (Paper No. 20, 2013).

<sup>19</sup> RAKESH KOCHHAR, RICHARD FRY & PAUL TAYLOR, PEW RESEARCH CTR., WEALTH GAPS RISE TO RECORD HIGHS BETWEEN WHITES, BLACKS, AND HISPANICS 5 (2011).

<sup>20</sup> Rakesh Kochhar & Richard Fry, *Wealth Inequality Has Widened Along Racial, Ethnic Lines Since End of Great Recession*, PEW RESEARCH CTR. (Dec. 12, 2014), <http://www.pewresearch.org/fact-tank/2014/12/12/racial-wealth-gaps-great-recession/>.

<sup>21</sup> This Article examines the contributions of Fed regulatory policies to economic inequality. A different discussion of the role of Fed monetary policy, especially the novel quantitative easing program, in enhancing economic inequality is outside the scope of this paper. There is intense discussion among macroeconomists about how interest rate policy and aggressive bond buying stimulate the economy in the absence of legislative stimulus to replace the weak consumer demand during the recession. The monetary policy critique of the Fed contribution to inequality is robust and interesting, but is not a part of my argument.

shadow bank money market funds, tri party repo and asset backed commercial paper markets. The Fed's commitment to consistent application of moral hazard<sup>22</sup> to dissuade market actors from expecting government rescues will be a matter of controversy for years to come. Bear Stearns and Lehman Brothers, for instance, had many similarities in their distressed balance sheets; both were filled with mortgage backed assets and dependent on overnight funding from repo lenders. The Fed and Treasury explanations for saving Bear Stearns on the one hand and letting Lehman fail shortly thereafter have varied from "they had a hole in their balance sheet"<sup>23</sup> and "the troubles at Lehman had been well known for some time . . . Thus we judged that investors and counterparties had had time to take precautionary measures"<sup>24</sup> to we "did not have the legal ability to save Lehman because the firm did not have sufficient collateral to secure a loan from the Fed under Sec 13(3)."<sup>25</sup> These actions thus triggered massive uncertainty and panic in the opaque "shadow banking sector."<sup>26</sup>

Finally, the Fed's incoherent fidelity to the principle of moral hazard led them to refuse to provide direct assistance to homeowners with unsustainable home mortgages. We can see that the Fed's moral hazard myopia directly contributed to post-crisis inequality by its refusal to use its emergency lending authority to establish a facility for restructuring home mortgages during the crisis. There was ample precedent for this approach in the 1934 New Deal Home Owners Loan Corporation (HOLC) whereby HOLC did restructure mortgages to help individual citizens as well as banks.

This Article provides an introductory analysis of Fed actions before, during, and after the 2008 financial crisis to challenge the accuracy of the claim that "inequality was not within the jurisdiction of the Fed." My goal for this Article and my research agenda for the foreseeable future is to answer the question, "What can the Fed Do About Inequality?"

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<sup>22</sup> See FINANCIAL CRISIS INQUIRY REPORT, *supra* note 9, at 331 (providing insight into how the Fed, and the New York Fed in particular, relied on moral hazard during the 2008 Lehman bankruptcy). In a September 2008 memo circulated at the Federal Reserve during the Lehman crisis, New York Fed Senior Vice President Patricia Moeser wrote: "No more Maiden Lane LLCs and no equity position by [the] Fed. Moral hazard and reputation cost is too high. If the Fed agrees to another equity investment, it signals that everything [the Fed] did in March in terms of temporary liquidity backstops is useless. Horrible precedent; in the long run MUCH worse than [bankruptcy] . . . [which would be a] mess on every level, but fixes the moral hazard problem."

<sup>23</sup> *Id.* at 325.

<sup>24</sup> *Id.* at 340.

<sup>25</sup> *Id.*; Jennifer Dauble, *Larry Kudlow Interviews Secretary of the Treasury Henry Paulson on CNBC's "Kudlow & Company" (Transcript Included)*, CNBC (July 23, 2007, 5:00 PM), <http://www.cnbc.com/id/19921217>.

<sup>26</sup> See generally FINANCIAL CRISIS INQUIRY REPORT, *supra* note 9, at 27-37.

## I. INEQUALITY OVERVIEW

### A. America's Inequality Problem

#### 1. A Racial History of Housing: The Overlooked Financial Crisis

A search of the Fed Federal Open Market Committee (FOMC) transcripts from 2007-2008 fails to reveal a single mention of race—not one within the entire 1,800 pages. The financial crisis was a sad and tangled morass of human and economic failures that spanned the depth and breadth of the market for home mortgages.<sup>27</sup> In this section, I look at the active role of pre-existing economic and social inequality<sup>28</sup> in setting the conditions for the first subprime mortgage products. These loan products contained many undesirable features, including higher interest rates,<sup>29</sup> points, and fees; prepayment penalties; and variable rate payment schedules, often packaged as ‘pay option’ loans with negative amortization balloons. John Martin argues that the high-risk cocktail of subprime loan features, combined with the rise of the originate-to-distribute model of lending, precipitated the recent global financial panic and economic collapse.<sup>30</sup> In subsequent sections, I explore how neo-classical economic theories<sup>31</sup> about the dynamics of racial discrimination in markets<sup>32</sup> served to inhibit the regulatory response to widespread consumer rights violations in the markets for subprime loans, even in the face of accumulating evidence.

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<sup>27</sup> Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Reserve Sys., Speech at the Federal Reserve System Conference on Housing and Mortgage Markets: Housing, Mortgage Markets, and Foreclosures (Dec. 4, 2008), <https://www.federalreserve.gov/newsevents/speech/bernanke20081204a.htm>.

<sup>28</sup> U.S. DEP'T OF COM., CENSUS BUREAU, HOUSEHOLD INCOME BY RACE AND HISPANIC ORIGIN (2000) (indicating that, in 1999, the median income of Blacks was \$29,423, compared to \$45,367 for whites).

<sup>29</sup> ERIC STEIN, QUANTIFYING THE ECONOMIC COST OF PREDATORY LENDING: A REPORT FROM THE COALITION FOR RESPONSIBLE LENDING 2 (2001).

<sup>30</sup> JOHN D. MARTIN ET AL., A PRIMER ON THE ROLE OF SECURITIZATION IN THE CREDIT MARKET CRISIS OF 2007 1 (2011).

<sup>31</sup> Gary Stanley Becker, The Economics of Racial Discrimination 41 (Jun. 1955) (unpublished Ph.D dissertation, University of Chicago).

<sup>32</sup> *Id.*; EDWARD M. GRAMLICH, SUBPRIME MORTGAGES: AMERICA'S LATEST BOOM AND BUST 24 (2007) (“[R]acial minorities were basically shut out of the first American housing boom at the close of World War II . . . [and currently] housing and mortgage markets have become so complicated that discrimination seems to take place in many subtle ways.”)



## 2. The Animal Spirits of Racial Exploitation:<sup>33</sup> History of Government Sponsored Racially Discriminatory Mortgage Loans

Homeownership is the single most important means through which Americans accumulate asset wealth. It is the centerpiece of middle class family balance sheets. It follows, then, that the wealth gap between African Americans and other racial minorities and whites is largely attributable to the nation's history of racial discrimination in both the public and private sector housing markets.

The housing industry was crushed by the financial exigencies of the Great Depression, forcing the US government to abandon its traditionally passive role in the residential housing market. Indeed, "[b]etween 1928 and 1933, home construction declined by 95 percent and spending on home improvements fell by 90 percent."<sup>34</sup> The Roosevelt administration responded to the housing crisis of the Great Depression by introducing several programs, including the Home Owners Loan Corporation (HOLC), The Fair Housing Administration (FHA), and the Veterans Administration (VA). Housing was a central building block of government support for FDR's "forgotten man" at the bottom of the economic pyramid. These government entities would implement and institutionalize racially discriminatory practices that excluded African Americans from homeownership. From 1930 to 1960, "fewer than one percent of all mortgages in the nation were issued to African Americans."<sup>35</sup>

The HOLC, a New Deal program created under the Federal Home Loan Bank Board in 1933, was authorized to purchase qualifying mortgages from financial institutions in exchange for tax-exempt 4%, eighteen-year bonds. HOLC restructured these mortgages into fifteen- to twenty-year, fixed-rate, fully amortized obligations at 5% interest rates, which benefitted borrowers by reducing their payment burdens. "The HOLC was not quick to foreclose on delinquent loans, being 'as considerate of delinquent but deserving borrowers as its responsibility to the Federal Government and the taxpaying public will

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<sup>33</sup> See generally GEORGE AKERLOF & ROBERT J. SHILLER, *ANIMAL SPIRITS: HOW HUMAN PSYCHOLOGY DRIVES THE ECONOMY, AND WHY IT MATTERS FOR GLOBAL CAPITALISM* (2009).

<sup>34</sup> See Charles Lewis Nier III, *The Shadow of Credit: The Historical Origins of Racial Predatory Lending and Its Impact Upon African American Wealth Accumulation*, 11 U. PA. J.L. & SOC. CHANGE 131, 174 (2007-2008) (citing KENNETH T. JACKSON, *CRABGRASS FRONTIER: THE SUBURBANIZATION OF THE UNITED STATES* 118 (1985) (citing STEPHAN THERNSTROM, *POVERTY AND PROGRESS: SOCIAL MOBILITY IN A NINETEENTH CENTURY CITY* 117 (1964)) (explaining the effect of the Great Depression on the residential housing market).

<sup>35</sup> *Id.* at 185 (citing DANIEL KIRP ET AL., *OUR TOWN: RACE, HOUSING AND THE SOUL OF SUBURBIA* 7 (1995)).

permit.”<sup>36</sup> The HOLC often counseled delinquent borrowers and readjusted payment schedules, rather than moving quickly to foreclose when borrowers fell behind on their payments. On average, HOLC loans were delinquent for two years before foreclosure.<sup>37</sup>

HOLC assessed the eligibility of properties for assistance by introducing a formal, written appraisal system that incorporated predominant “notions of ethnic and racial worth,” thereby advancing the interests of whites above that of minority communities and individuals, favoring segregation, and implicitly sanctioning racially discriminatory lending policies. This rating system was used to create color-coded residential security maps for use by real estate appraisers.<sup>38</sup> This system would later influence the “underwriting practices of the Federal Housing Administration (FHA) and the Veteran’s Administration (VA).” The HOLC’s racial classification system was based on Homer Hoyt’s doctoral dissertation from the University of Chicago economics department. Dr. Hoyt became the HOLC’s first economist in 1933, and advanced to the FHA the following year to institute his discriminatory mortgage appraisal system into FHA’s loan guarantee criteria.

The FHA and VA provided government insurance against losses for qualifying mortgage instruments. These institutions encouraged individuals to borrow by extending the repayment period of insured loans to twenty-five or thirty years, which decreased monthly payment obligations. The loans were fully amortized so that borrowers would own their homes at the end of the loan term, a feature designed to coincide with a 30-year working life and retirement at the age of 60.<sup>39</sup> VA and FHA’s criteria for providing insurance to lenders operated on the premise that racial segregation was necessary to ensure the maintenance of property values, which furthered the exclusion of African Americans from the housing market.

Adam Gordon explains that when the FHA decided to insure low-down-payment, long-term mortgages in order to promote homeownership, “it produced underwriting guidelines based on an economically and historically flawed

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<sup>36</sup> David C. Wheelock, *Government Response to Home Mortgage Distress: Lessons from the Great Depression* 15 (Fed. Reserve Bank of St. Louis, Research Division, Working Paper 2008-038A, 2008), <http://research.stlouisfed.org/wp/2008/2008-038.pdf> (citing THIRD ANNUAL REPORT OF THE FEDERAL HOME LOAN BANK BOARD 600 (1935), [https://fraser.stlouisfed.org/scribd/?item\\_id=23534&filepath=/files/docs/publications/holc/1935\\_annualrpt.pdf](https://fraser.stlouisfed.org/scribd/?item_id=23534&filepath=/files/docs/publications/holc/1935_annualrpt.pdf)).

<sup>37</sup> CLEMENT LOWELL HARRISS, *HISTORY AND POLICIES OF THE HOME OWNERS’ LOAN CORPORATION* 73 (1st ed. 1951).

<sup>38</sup> THOMAS SUGRUE, *THE ORIGINS OF THE URBAN CRISIS: RACE AND INEQUALITY IN POSTWAR DETROIT* 44 (2d ed. 2005) (reporting that, in Detroit, every African American neighborhood was rated “D” or “hazardous” by federal appraisers)

<sup>39</sup> JORDAN & HARRIS, *supra* note 5, at 80.

understanding of a ‘natural’ progression of neighborhood racial change from all-white (with high property values) to all-black (with low property values).”<sup>40</sup> These guidelines rated a neighborhood’s suitability for FHA insurance based on racial composition: “‘A’ neighborhoods had to be ‘homogenous’—meaning ‘American business and professional men’—and ‘American’—meaning white and often, native-born. Predominantly black neighborhoods received a ‘D grade’” under these guidelines.<sup>41</sup> The geographic boundaries of the neighborhoods in which FHA was willing to guarantee home mortgages excluded all black neighborhoods, and previously all-white neighborhoods that were in transition from white to integrated.<sup>42</sup> Thus, private financial institutions hoping to qualify for FHA or VA insurance “were reluctant to provide mortgages to areas inhabited by prosperous African Americans, and refused to originate any mortgage loans to African Americans seeking to acquire property in the vicinity of white neighborhoods.” Racially discriminatory procedures quickly became standard throughout the mortgage industry, even for private individuals and savings and loan institutions. While private insurers might have arisen to offer African-Americans the opportunities denied to them by the FHA, Congress and state legislatures amended safety-and-soundness regulations in a way that disallowed competition with the FHA.<sup>43</sup>

### 3. Credit Starvation: A Necessary Precondition to Demand for Subprime Loans

HOLC, FHA and VA were the exclusive venues for affordable home mortgages. As a result, predatory practices, including pay day loans and land sale contracts, surged to fill the void of government support for housing in

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<sup>40</sup> Adam Gordon, *The Creation of Homeownership: How New Deal Changes in Banking Regulation Simultaneously Made Homeownership Accessible to Whites and Out of Reach for Blacks*, 115 YALE L.J. 186, 189, 193, 208 (2005). Gordon describes a racially discriminatory pattern of access to government home mortgage finance based on the underwriting criteria for the FHA mortgage program that provided for the first time 30 year fixed rate mortgages with down payments as low as 20%. The FHA criteria were based upon the view that stable neighborhoods were racially homogeneous and white. The geographic boundaries of the neighborhoods in which FHA was willing to guarantee home mortgages excluded all black neighborhoods, and previously white neighborhoods that were in transition from white to integrated.

<sup>41</sup> *Id.* at 190–209.

<sup>42</sup> *Id.* at 207–08, 216. The FHA’s underwriting manual warned appraisers of the dangers of infiltration of racial minorities into white neighborhoods, and encouraged the use of restrictive covenants as a mechanism for maintaining neighborhood stability via racial segregation. This recommendation remained in place until 1950, two years after the Supreme Court declared racial covenants unenforceable.

<sup>43</sup> *Id.* at 189.

redlined urban black neighborhoods. Predatory practices such as land sale contracts flourished.<sup>44</sup> Thus, federal housing policy was instrumental in ensuring that “African-Americans were denied the opportunities to buy a home in developing suburban neighborhoods and to build the wealth that became the mainstay of the American white middle class.”<sup>45</sup> Given that less than 1% of mortgages were issued to blacks between 1930 and 1960, blacks were frequently compelled to seek “less favorable, often predatory, forms of mortgage financing.”<sup>46</sup> “Blocked from low-interest government-backed guaranteed loans, redlined by financial institutions, or barred from homeownership by restrictive covenants, black families have [long] been denied the benefits of housing inflation and the subsequent vast increase in home equity assets.”<sup>47</sup> “[W]here blacks were prevented, often through violence, from owning property, or loans were not granted to African American business owners, or black homeowners could not access FHA mortgages, or blacks were excluded from unions, or the police force, or fire departments - meant that black families could not amass any meaningful wealth to bequeath to future generations. This history helps explain the wealth and income gap [that exists] between black and white, and the concentrated pockets of poverty that persist in so many of today's urban and rural communities.”<sup>48</sup> Blacks and other minorities were set up as easy targets for predatory lending by decades of exclusion from prime lending opportunities. Indeed, “African

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<sup>44</sup> See generally BERYL SATTER, *FAMILY PROPERTIES: HOW THE STRUGGLE OVER RACE AND REAL ESTATE TRANSFORMED CHICAGO AND URBAN AMERICA* (2010).

<sup>45</sup> Gordon, *supra* note 40, at 190–209. See also Jacob S. Rugh & Douglas S. Massey, *Racial Segregation and the American Foreclosure Crisis*, 75 AM. SOC. REV. 629, 630 (2010).

<sup>46</sup> Nier, *supra* note 34, at 185.

<sup>47</sup> MELVIN L. OLIVER & THOMAS M. SHAPIRO, *BLACK WEALTH, WHITE WEALTH: A NEW PERSPECTIVE ON RACIAL INEQUALITY* 23 (1997) (“Blocked from low-interest government-backed loans, redlined out by financial institutions, or barred from homeownership by banks, black families have been denied the benefits of housing inflation and the subsequent vast increase in home equity assets.”).

<sup>48</sup> Nier, *supra* note 34, at 132 (citations omitted). See also Spencer Overton, *But Some Are More Equal: Race, Exclusion, and Campaign Finance*, 80 TEX. L. REV. 987, 1006 (2002) (“The racial disparity in wealth realized through home ownership and home value originally caused by federal housing policies has since been compounded by seemingly neutral public and private decisions. Because people of color are less likely to own homes, they are less likely to take advantage of tax provisions allowing for the deduction of a large percentage of their housing costs (all property taxes and mortgage interest). Further, the home values appreciated dramatically during the period between 1934 and the 1970s, and this increase benefited whites more than people of color. Even people of color who were able to purchase homes were less likely than whites to benefit from increasing home values because of the slower rate of appreciation of property in nonwhite areas.”).

Americans, along with other minorities and low-income populations, have been the targets of the sub-prime mortgage system,<sup>49</sup> as targeting has replaced redlining as a means of financial exploitation.

In fact, the growth of subprime lending has been disproportionately concentrated among African Americans and in African American neighborhoods. In 1993, subprime refinancing loans accounted for just 8% of home loans in African American neighborhoods and 1% in white neighborhoods. By 1998, the number of subprime refinancing loans had dramatically increased to 51% of the total loans in African American neighborhoods compared to only 9% in white neighborhoods. By 2005, 52% of the total mortgage loans to African Americans were subprime loans, in contrast to 19% for whites.

#### 4. Bait and Switch: Financially Vulnerable Populations Take the Bait

Financially vulnerable populations<sup>50</sup>—long excluded from prime lending opportunities and accustomed to predatory debt—historically had little chance to become homeowners. Earlier prime borrowers took mortgages for 30 years, with 20% cash down payments, borrowing 80% at interest rates averaging about 6%. Then, in the eleven-year period between 1994 and 2005, the subprime mortgage became a new product for financing the homes of middle- and working-class borrowers.<sup>51</sup> Unlike the prime borrowers who fueled the growth of middle class wealth in the post-war years, subprime borrowers in the late 90's had lower incomes, more compromised credit scores, and less money to make down payments on a house. In addition, these families did not have the benefit of the wealth accumulated from previous home ownership. Most subprime borrowers required 100% financing due to limited incomes with no surplus for a down payment. Second, subprime loans were

<sup>49</sup> Thomas M. Shapiro & Melvin L. Oliver, *Sub-Prime as a Black Catastrophe*, AM. PROSPECT (Sept. 22, 2008), [http://www.prospect.org/cs/articles?article=sub\\_prime\\_as\\_a\\_black\\_catastrophe](http://www.prospect.org/cs/articles?article=sub_prime_as_a_black_catastrophe).

<sup>50</sup> The pattern of racial discrimination across many sectors of consumer transactions has been demonstrated with empirical methods in highly influential studies; Ian Ayres, in particular, has conducted and published studies that document patterns of racial discrimination across a wide variety of high-value consumer transactions. See, e.g., Ian Ayres, *Fair Driving: Gender and Race Discrimination in Retail Car Negotiations*, 104 HARV. L. REV. 817, 827–41 (1991) (demonstrating, through empirical evidence, that retail car dealerships systematically offer substantially better prices on identical cars to white men than to blacks or women); IAN AYRES, *PERVASIVE PREJUDICE? UNCONVENTIONAL EVIDENCE OF RACE AND GENDER DISCRIMINATION* (2001) (presenting evidence that blacks and women are consistently at a disadvantage in multiple markets, including bail bonding, kidney transplantation, and FCC licensing).

<sup>51</sup> GRAMLICH, *supra* note 32, at 3 (“While all income groups have participated in this new opening up the mortgage market and rise in homeownership, low- and moderate- income households and racial and ethnic minorities have been at the center of the boom.”).

designed to calibrate the loan features to borrower characteristics at much higher interest rates to compensate lenders for the risk of default inherent in lending to buyers with no equity in the mortgage origination.<sup>52</sup>

The key distinction between the prime and subprime borrower during the period of rapid growth of home ownership 1994–2005<sup>53</sup> is that subprime borrowers had lower family incomes.<sup>54</sup> These new entrants to homeownership could only aspire to move from renting to home-owning when the new subprime mortgage products allowed them to substitute borrowing over thirty years for accumulated home equity from previous homes, or saving out of current income for the standard 10–20 percent down payment.<sup>55</sup>

The data that follows shows that preexisting income inequalities by race, when combined with inequalities in accumulated housing wealth, created opportunities for introducing new loan products to borrowers who had previously been excluded from home ownership. The exclusion was due to not only the amount, sources and stability of family income but also the structural features of government-facilitated discrimination in the home mortgage industry.<sup>56</sup>

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<sup>52</sup> *Id.* See generally Rosen Richard J., *The Impact of the Originate-to-Distribute Model on Banks Before and During the Financial Crisis* (Fed. Reserve Bank of Chicago, Working Paper No. WP-10-20, 2011).

<sup>53</sup> *Id.* at 3. Gramlich discusses the dramatic expansion of homeownership in the period immediately following World War II. “The overall homeownership rate/percentage of home owners rose from 45% to 65% in the ten years following after the war.” See also Gordon, *supra* note 40, at 193; GRAMLICH, *supra* note 32, at 1. Gordon describes a racially discriminatory pattern of access to home mortgage finance based on the underwriting criteria for the FHA mortgage program that first provided 30 year fixed rate mortgages with down payments as low as 20%. The FHA criteria were based on the view that stable neighborhoods were racially homogeneous and white. The geographic boundaries of the neighborhoods in which FHA was willing to guarantee home mortgages excluded all black neighborhoods, and previously white neighborhoods that were in transition from white to integrated. JAMES GREER, RACE AND MORTGAGE REDLINING IN THE UNITED STATES 6 (2012). In short, “African Americans, along with other minorities and low-income populations, have been the targets of the sub-prime mortgage system.” Shapiro & Oliver, *supra* note 49.

<sup>54</sup> THOMAS M. SHAPIRO, THE HIDDEN COST OF BEING AFRICAN AMERICAN 119 (2004).

<sup>55</sup> GRAMLICH, *supra* note 32, at 1–2.

<sup>56</sup> Gordon, *supra* note 40, at 189, 207, 209, 222. Gordon explains that when the FHA decided that it would insure low-down-payment, long-term mortgages in order to promote homeownership, it “produced underwriting guidelines based on an economically and historically flawed understanding of a ‘natural’ progression of neighborhood racial change from all-white (with high property values) to all-black (with low property values).” *Id.* at 189. “These guidelines rated a neighborhood’s suitability for insurance based on racial composition . . .” *Id.*

The Home Owners’ Loan Corporation rated every urban and suburban neighborhood in America as “A,” “B,” “C,” or “D” quality, color coding maps of every metropolitan area (“D,” or lowest quality, was colored red—

If we look at income measures we can see that by 2001, the beginning of the housing bubble in America, the nominal gap in median net household wealth between blacks and whites had grown from \$44,000 in 1984 to \$86,000 in 2001. This income gap helped set the stage for differences in home ownership rates.<sup>57</sup>

In addition to the effects of disparate income, as Thomas Shapiro and Melvin Oliver have established, the down payment deficit of lower-income borrowers is a direct byproduct of intergenerational wealth differences between blacks and whites that are attributable to the legacy of slavery and Jim Crow employment and residential segregation.

Racial disparities in housing finance posed systemic financial risks because pre-existing income, credit, wealth, and housing ownership disparities between blacks and whites created virtually irresistible pools for subprime mortgage transactions, with scant government oversight. The Fed's failure to control exploitative mortgage products combined with prevailing social attitudes and stubborn practices of housing segregation created a perfect storm that devastated the global financial community.<sup>58</sup> The interconnectedness of financial institutions, both regulated and largely unregulated, provided the once-hidden vector for spreading losses caused by the predictable defaults in segregated communities to the balance sheets of investors throughout the globe.

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the origin of the term "redlining"). Quality ratings were based on age and type of housing stock, but also very much on race. "A" neighborhoods had to be "homogenous"—meaning "American business and professional men"—and "American"—meaning white and often, native-born.<sup>99</sup> Predominantly black neighborhoods received a "D" grade.

*Id.* at 207 (citations omitted). Consequently, the FHA's underwriting criteria resulted in "much lower rates of lending to nonwhites than to whites." *Id.* at 209. "African Americans were denied the opportunities to buy a home in developing suburban neighborhoods and to build the wealth that became the mainstay of the American white middle class." *Id.* at 222.

When African Americans did buy homes, usually using conventional mortgages, they not only tended to pay more in down payments and roughly the same monthly payments when compared with whites using FHA-insured mortgages, but they also got much lower-quality homes. While private insurers might have arisen to offer African-Americans the opportunities denied to them by the FHA, Congress and state legislatures amended safety-and-soundness regulations in a way that disallowed competition with the FHA.

*Id.*

<sup>57</sup> GRAMLICH, *supra* note 32, at 3. "[F]rom 1994 to 2005, the overall rate rose from 64 to 69 percent." *Id.* However, "the rate for blacks rose from 42 to 49 percent." *Id.*

<sup>58</sup> JOINT CTR. FOR HOUS. STUD. AT HARV. UNIV., *THE STATE OF NATION'S HOUSING* 17 (2008).

## 5. Mortgage Brokers Compensation: Financial Incentives for Racial Steering

At an inner-city intersection, where globalized capital and free-market finance meet America's shameful history of racial segregation and subordination, a new and insidious form of racial discrimination lurks. Where lending discrimination once took a binary form—bigoted loan officers rejecting loan applicants because of their skin color—the new model of discrimination is pure and simple exploitation. Unscrupulous lenders now take advantage of a history of racial redlining by aggressively marketing overpriced loan products with onerous terms in the same neighborhoods where mainstream lenders once refused to lend.

“Conflicts of interest created by the OTD model provide the most likely explanation for the links between securitization, higher-risk loans and rising default rates.”<sup>59</sup> Lenders earned higher fees for selling subprime loans packaged into private label mortgage backed securities than for selling prime loans packaged into GSE issued mortgage-backed securities.<sup>54</sup> As a result, lenders encouraged their mortgage brokers to sell more subprime loans by offering larger commissions and yield-spread premiums as incentive, among other things.<sup>60</sup>

During the subprime boom, many large mortgage originators restructured their commission systems so that mortgage loan officers and underwriters would be paid considerably higher commissions when customers purchased subprime loans instead of prime loans. Wells Fargo is one such mortgage originator. The company adopted a commission structure that favored subprime loan origination in company offices nationwide. As a result, many Wells Fargo loan officers earned over a half million dollars per year.<sup>61</sup> Beth Jacobson,

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<sup>59</sup> Arthur E. Wilmarth, Jr., *The Dark Side of Universal Banking: Financial Conglomerates and the Origins of Subprime Financial Crisis*, 41 CONN. LAW. REV. 963, 1024 (2009).

<sup>54</sup> *Id.*

<sup>60</sup> Peter S. Goodman & Gretchen Morgenson, *Saying Yes to Anyone: WaMu Built Empire on Shaky Loans*, N.Y. TIMES (Dec. 28, 2008), <https://nyti.ms/2kAYIAf> (“WaMu gave mortgage brokers handsome commissions for selling the riskiest loans, which carried higher fees, bolstering profits and ultimately the compensation of the bank's executives”); Gretchen Morgenson, *Inside the Countrywide Lending Spree*, N.Y. TIMES (Aug. 26, 2007), <https://nyti.ms/2k9mJIB> (“The company's incentive system . . . encouraged brokers and sales representatives to move borrowers into the subprime category, even if their financial position meant that they belonged higher up the loan spectrum.”); Wilmarth, *supra* note 59, at 1025–26 (2009) (discussing that lenders had incentives to promote high-risk loans, such as earning higher fees).

<sup>61</sup> Ylan Q. Mui, *Ex-loan Officer Claims Wells Fargo Targeted Black Communities for Shoddy Loans*, WASH. POST (Jun 12, 2012), <https://www.washingtonpost.com/business/econ>



a Baltimore loan officer for Wells Fargo “churned out roughly \$50 million in loans annually for Wells Fargo, making her the top-producing subprime officer in the country. She earned as much as \$700,000 one year, more than seven times the company’s stated average for subprime-loan officers in her area.”<sup>62</sup>

The incentive to maximize profits led to widespread misconduct in mortgage origination practices by brokers throughout the industry. Prior to the reform measures, “consumers [paid] penalties that [made] it more expensive—and sometimes impossible . . . to switch out of their loans if they [felt] they have been given a bad deal,” giving lenders an incentive to sell iniquitous adjustable rate mortgages (ARMs). This is perhaps why “more than fifty-seven percent of the subprime loans granted in 2006 are in foreclosure or pre-foreclosure.”<sup>63</sup> Brokers disproportionately targeted African-Americans with adjustable rate mortgages.<sup>64</sup>

In her sworn affidavit, Beth Jacobson, a Baltimore-based former employee of Wells Fargo, described a work environment in which officers often used dishonesty and fraud to shift customers into subprime products. Ms. Jacobson reported that colleagues “falsified loan applications in order to [steer prime borrowers to] subprime loans,” sometimes cutting and pasting credit reports for one customer onto another’s application, or falsely claiming that the applicant did not wish to provide documentation to override computer restrictions on subprime loan allocations.<sup>65</sup>

Another Wells Fargo employee, Mr. Tony Paschal, reported in his affidavit that when computer software flagged subprime loans going to what should have been prime customers, underwriters would enter one of a number of “stock responses,” including “customer has no assets,” to override the

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omy/former-wells-fargo-loan-officer-testifies-in-baltimore-mortgage-lawsuit/2012/06/12/gJQA6EGtXV\_story.html.

<sup>62</sup> *Id.*

<sup>63</sup> Chris Levister, *Landmark Financial Overhaul Will Protect African Americans*, BLACK VOICE NEWS (Jul. 24, 2010), <http://newamericamedia.org/2010/07/landmark-financial-overhaul-will-protect-african-americans.php>.

<sup>64</sup> CTR. FOR RESPONSIBLE LENDING, UNFAIR AND UNSAFE: HOW COUNTRYWIDE’S IRRESPONSIBLE PRACTICES HAVE HARMED BORROWERS AND SHAREHOLDERS 2 (2008) (stating that borrowers and regulators have accused Countrywide of engaging in: “steering borrowers with good credit into higher-cost “subprime” loans; gouging minority borrowers with discriminatory rates and fees; working in cahoots with mortgage brokers who use bait-and-switch tactics to land borrowers into loans they can’t afford; targeting elderly and non-English-speaking borrowers for abusive loans; and packing loans with inflated and unauthorized fees”).

<sup>65</sup> Plaintiff’s Motion to Reconsider, *Baltimore v. Wells Fargo* (D. Md. June 29, 2009) (No. 1:08-cv-00062-BEL), at \*22 (copies of docket court filings are on file with *Journal of Law & Public Affairs*).

system and approve the loan. Loans to minority borrowers were the centerpiece of the subprime loan fee maximizing strategy. Mr. Paschal remarked that the bank put “bounties” on minority customers, offering cash incentives to employees who aggressively marketed subprime loans in minority communities. Wells Fargo encouraged its loan officer to push subprime loans in black churches and to conduct seminars in minority neighborhoods.<sup>66</sup> For instance, the Wells Fargo office in Silver Spring, Maryland, created an Affinity Group consisting entirely of African American employees whose job was to target African Americans and African American churches. Employees began to refer to minority customers as “mud people,” and the subprime loans made to them as “ghetto loans.”<sup>67</sup>

Studies disclose that a black homebuyer, “even in upper-income African-American neighborhoods . . . is one-and-a-half times as likely to have a subprime loan as persons in low-income white neighborhoods.”<sup>68</sup> “[T]he Federal Reserve found that African Americans—especially black women—were two to three times more likely to be steered into costly subprime mortgages, even when they had good credit[.]”<sup>69</sup> Additionally, “when these consumers tried to get out of high-rate loans, they often couldn’t because the loans had balloon payments or were packed with expensive prepayment penalties.”<sup>70</sup>

In the years leading up to the financial meltdown, more than half of the loans granted to African Americans were subprime. In fact, African Americans “were three times more likely to receive higher-priced loans than whites.”<sup>71</sup>

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<sup>66</sup> *Id.* at 17.

<sup>67</sup> PAUL MUOLO & MATHEW PADILLA, CHAIN OF BLAME: HOW WALL STREET CAUSED THE MORTGAGE AND CREDIT CRISIS 64–69, 82–87, 120–25, 263–65 (2008).

<sup>68</sup> MICHAEL L. RUSTAD, EVERYDAY LAW FOR CONSUMERS (2015).

<sup>69</sup> Lynette Khalfani-Cox, *Study Shows Dramatic Decrease in Mortgage Loans to Minorities*, THE GRIOT (Feb. 16, 2011), <http://thegriot.com/2011/02/16/study-shows-dramatic-decrease-in-mortgage-loans-to-minorities/>. See also ALLEN J. FISHBEIN & PATRICK WOODALL, CONSUMER FED’N OF AM., WOMEN ARE PRIME TARGETS FOR SUBPRIME LENDING: WOMEN ARE DISPROPORTIONATELY REPRESENTED IN HIGH-COST MORTGAGE MARKET 4 (2006) (“Women are more likely to receive subprime mortgages than men of the same race and women of color are much more likely to receive subprime mortgages than white men.”).

<sup>70</sup> Lynette Khalfani-Cox, *The President’s Financial Reform & African Americans*; TONY BARD WRITE: DESTINATIONS (Jul. 22, 2010) <http://tonybardwrite.blogspot.com/2010/07/financial-reform-and-african-americans.html>. See generally Roberto G. Quercia et al., *The Impact of Predatory Loan Terms on Subprime Foreclosures: The Special Case of Prepayment Penalties & Balloon Payments*, 21 CORNELL J. OF LAW AND PUB. POL’Y 247, 255 (2007) (“[R]efinance loans with prepayment penalties are 20% more likely to experience a foreclosure, and loans with balloon payments are about 50% more likely to do so.”).

<sup>71</sup> Alexander J. Chenault, *New Financial Regulation Reform: A Good Measure for African Americans*, 33 N.C. CENT. L. REV. 123, 134-35 (2011). See generally DEPARTMENT OF JUSTICE, JUSTICE DEPARTMENT REACHES SETTLEMENT WITH WELLS FARGO RESULTING IN

## 6. Securitization: Boomerang Contracts and the Paradox of Financial Engineering (the Originate-To-Distribute Model<sup>72</sup>)

Traditional mortgages were issued by bankers in green eyeshades. Mortgages stayed on bank balance sheets. As such, community bankers carefully scrutinized the credit worthiness of each individual borrower in order to ensure that their investment was ultimately profitable. Portfolio lenders approved home mortgages based on ability to repay and full documentation, and then, only if the borrower had accumulated a twenty percent cash down payment.

Securitization allowed banks to convert illiquid mortgages into asset-backed securities (ABS) that could be sold to investors through capital markets. This allowed banks to reduce their reliance on deposits for funding to make loans. Notably, banks were able to move loans off their balance sheets and thereby reduce their regulatory capital requirements through securitization of their mortgage holdings. Notes Arthur Wilmarth, Jr., “Securitization offered at least three additional benefits to lenders. First, banks with less than a ‘AAA’ credit rating could use securitizations to create ABS that qualified for ‘AAA’-ratings. Second, banks earned substantial fees for originating and securitizing loans and could earn additional fees by servicing the loans held in securitized pools. Third, securitization permitted banks to transfer to investors much of the credit risk associated with the securitized loans.”<sup>73</sup> Thus, a bank that originated a loan that it securitized and sold to investors on the secondary market would be insulated from financial harm in the event of default by the borrower. In a 2011 report, the Financial Crisis Inquiry Commission noted that the opportunity for increased profits created by securitization incentivized banks to originate and distribute as many loans as possible. The corresponding insulation from risk simultaneously removed the incentive to ensure the long-term profitability of mortgage products, creating what some have referred to as the conditions of a perfect storm.<sup>74</sup>

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MORE THAN \$175 MILLION IN RELIEF FOR HOMEOWNERS TO RESOLVE FAIR LENDING CLAIMS (2012), <https://www.justice.gov/opa/pr/justice-department-reaches-settlement-wells-fargo-resulting-more-175-million-relief> (“The Department of Justice . . . filed the second largest fair lending settlement in the department’s history to resolve allegations that Wells Fargo . . . engaged in a pattern of discrimination against qualified African-American and Hispanic borrowers in its mortgage lending . . .”).

<sup>72</sup> See DAVID MARSTON ET AL., INT’L MONETARY FUND, UNDERSTANDING FINANCIAL INTERCONNECTEDNESS 5 (Oct. 4, 2010), <http://www.imf.org/external/np/pp/eng/2010/100410.pdf> [hereinafter UNDERSTANDING FINANCIAL INTERCONNECTEDNESS] (illustrating global interconnections and risk concentrations in the run up to the 2008 financial crisis).

<sup>73</sup> Wilmarth, *supra* note 59, at 985.

<sup>74</sup> FINANCIAL CRISIS INQUIRY REPORT, *supra* note 9, at 3.

Financial Institutions adopted the originate to distribute (OTD) business model “in order to (i) maximize fee income, (ii) reduce their capital charges, and (iii) transfer to investors (at least ostensibly) the risks associated with securitized loans and structured-finance products.” At the largest of these financial institutions, fees were collected at every stage of the OTD process, and represented 76% of total earnings by 2007.<sup>75</sup>

The originate-to-distribute model cut the traditional link of reciprocal accountability between borrower and lender. The effect was the opposite. Instead of distance and separation, the new products created greater enmeshment; an unintended dependence among investors and between lenders and borrowers. “[A]s large financial conglomerates pursued similar OTD and fee-maximizing strategies, their collective exposures to financial risks—including credit risk, liquidity risk, market risk and systemic risk increased dramatically.”<sup>76</sup>

The emerging system of shadow banking through unregulated off balance sheet financial institutions created bonds of international balance sheet linkage that were invisible before the financial crisis revealed these crucial linkages based on complex financial engineering.<sup>77</sup>

## 7. Boomerang Contracts and the Paradox of Financial Engineering

Several studies have confirmed that there is a strong linkage between increased levels of securitization and increasingly risky lending behavior among financial institutions. For example, one study found that if lenders in a particular community used securitization to sell a higher percentage of their loans after origination, that community would receive higher risk subprime mortgages and record higher default and foreclosure rates. The “securitized share of nonprime loans increased significantly between 2001 and 2006, during the same period when lending standards were declining.”<sup>78</sup>

Antje Berndt and Anurag Gupta examine and compare the long run performance of borrowers where there is an active secondary market for the loans and those where there is no such market.<sup>79</sup> They explain that moral hazard and adverse selection play a significant role in determining the riskiness of bank lending. The banks’ superior information about the credit quality of

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<sup>75</sup> Wilmarth, *supra* note 59, at 995. Perhaps most importantly, the OTD approach also offered financial conglomerates the apparent benefit of shifting to investors the risks associated with securitized loans and other structured finance products.

<sup>76</sup> *Id.* at 996.

<sup>77</sup> See generally UNDERSTANDING FINANCIAL INTERCONNECTEDNESS, *supra* note 72.

<sup>78</sup> *Id.* at 1024.

<sup>79</sup> Antje Berndt & Anurag Gupta, *Moral Hazard and Adverse Selection in the Originate-to-Distribute Model of Bank Credit*, 56 J. MONETARY ECON. 725, 728 (2009).

their loans gave rise to “adverse selection,” whereby banks sell off loans about which they have negative private information. Berndt and Gupta assert that banks originate “lemons” in order to “expand their origination-fee-based income, since they are able to sell these loans, relatively easily in the secondary market to outside investors . . . .”<sup>80</sup>

Additionally, banks that sell loans would have a reduced incentive to engage in costly screening and monitoring of the borrowers about whom they have negative private information, since the lending relationship is ultimately severed.<sup>81</sup> Also, when the “borrowers lose the discipline of lender monitoring, they may be more prone to making suboptimal investment and operating decisions, which leads to their negative long-run performance and value destruction.”

As the securitized share of nonprime lending increased, lending standards deteriorated. Financial institutions offered more subprime mortgages, which required low initial payments and much higher payments after their introductory teaser interest and payment rates expired. When interest rates of these adjustable rate mortgages were reset, borrowers experienced payment shock.

In general, borrowers who entered these subprime loan contracts would be in danger of default if they could not refinance their mortgages before teaser rates expired—an option available only as long as housing prices continued to increase.<sup>82</sup> When housing prices stagnated in 2006 and began to decrease in 2007, these borrowers could no longer refinance. The Ponzi scheme of housing finance became unsustainable when borrowers could no longer take out new loans to pay off old ones, resulting in an explosion of defaults and foreclosures, and ultimately, the financial crisis.<sup>83</sup>

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<sup>80</sup> *Id.*

<sup>81</sup> *Id.* at 727. Especially true because of rapid exhaustion of prime borrower pools that have resources to afford down payments once securitization becomes possible “with enormous fees accruing to those throughout the mortgage supply chain, from the mortgage broker selling the loans, to small banks that funded the brokers, to the giant investment banks behind them. By approximately 2003, the supply of mortgages originated at traditional lending standards had been exhausted. However, continued strong demand for MBS and CDO began to drive down lending standards, as long as mortgages could still be sold along the supply chain. Eventually, this speculative bubble proved unsustainable.” DONALD RAPP, *BUBBLES, BOOMS, AND BUSTS: THE RISE AND FALL OF FINANCIAL ASSETS* 290 (2d ed. 2014); *see also* FINANCIAL CRISIS INQUIRY REPORT, *supra* note 9, at 11.

<sup>82</sup> While the housing boom lasted, many nonprime borrowers refinanced their loans (several times, in some cases) by taking out new ARMs with similar teaser rate and interest escalation features. Wilmarth, *supra* note 59, at 1021–24.

<sup>83</sup> *Id.* at 970.

## 8. Data Brokers and the New Efficiency of Discriminatory Lending

Privacy advocates have encouraged improved government regulation of the data broker<sup>84</sup> industry in recent years, particularly with regard to the role of data brokers in facilitating the data driven marketing strategies in various business sectors. Due to mounting concern, both the US Government Accountability Office (GAO) and the Senate Commerce Committee have recently released reports detailing the results of their investigations into data broker industry practices.<sup>85</sup>

The Senate Commerce Committee report, released on December 18, 2013, focused on determining what consumer data the data broker industry collects; how specific this data is; how the data broker industry obtains consumer data; who buys this data; and how is it used. The Committee concluded that government regulations have lagged behind the technological advancements that have served to exponentially increase the availability of various types of consumer information. Notably, the Committee found that data brokers routinely compile and sell consumer profiles in which consumers are categorized and scored according to their degree of “financial vulnerability.” The Committee found that:

A number of these products focus on consumers’ financial vulnerability, carrying titles such as “Rural and Barely Making It,” “Ethnic Second-City Strugglers,” “Retiring on Empty: Singles,” “Tough Start: Young Single Parents,” and “Credit Crunched: City Families.”<sup>86</sup> One company reviewed, sells a marketing tool that helps to “identify and more effectively market to under-banked consumers” that the company describes as individuals including “widows” and “consumers with transitory lifestyles, such as military personnel” who

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<sup>84</sup> The Commerce Committee report adopted a broad definition of “data broker” developed by the Federal Trade Commission (FTC): “[c]ompanies that collect information, including personal information about consumers, from a wide variety of sources for the purpose of reselling such information to their customers for various purposes, including verifying an individual’s identity, differentiating records, marketing products, and preventing financial fraud[.]” FED. TRADE COMM’N, DATA BROKERS: A CALL FOR TRANSPARENCY AND ACCOUNTABILITY i (2014).

<sup>85</sup> See generally U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-13-663, INFORMATION RESELLERS: CONSUMER PRIVACY FRAMEWORK NEEDS TO REFLECT CHANGES IN TECHNOLOGY AND THE MARKETPLACE (2013).

<sup>86</sup> *What Information Do Data Brokers Have on Consumers, and How Do They Use It? Hearing Before the S. Comm. on Commerce, Science, and Transportation*, 113th Cong. 2 (2013).

annually spend millions on payday loans and other “non-traditional” financial products. The names, descriptions and characterizations in such products likely appeal to companies that sell high-cost loans and other financially risky products to populations more likely to need quick cash, and the sale and use of these consumer profiles merits close review . . . .<sup>87</sup>

It is now beyond dispute that predatory businesses, including some originators of subprime mortgages, used consumer profiles to target vulnerable populations, who are, as previously discussed, disproportionately consumers of color. For instance, according to the Senate Committee Report, “In October of 2012, the FTC alleged that the credit reporting division of Equifax improperly sold more than 17,000 ‘prescreened’ lists of consumers who were late on their mortgage payments to Direct Lending Source, Inc. and its affiliate companies.”<sup>88</sup> Direct Lending subsequently resold some of these lists to third parties, who “used the lists to pitch loan modification and debt relief services to people in financial distress, including to companies that had been the subject of prior law enforcement investigations.”<sup>89</sup>

Many scholars have attributed the systemic failure of the US housing market to the inability of financially vulnerable consumers to refinance or make good on ballooning debt obligations. We know now that these financially vulnerable individuals, disproportionately racial minorities that have suffered historical exclusion from the prime credit market, were intentionally targeted by predatory businesses, often through information garnered from data brokers.

This evidence begs the question: absent a history of racial discrimination in housing that created an easily identifiable population of financially vulnerable minorities, would the subprime industry have flourished as it did? Also, if subprime loans had been pushed onto more vulnerable whites, or onto financially capable whites, would their political capital have effected a more robust effort to stomp out predatory lending activities before the flame began to burn out of control?

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<sup>87</sup> OFF. OF OVERSIGHT AND INVESTIGATIONS MAJORITY STAFF, A REVIEW OF THE DATA BROKER INDUSTRY: COLLECTION, USE, AND SALE OF CONSUMER DATA FOR MARKETING PURPOSES i-ii (2013) (Staff Report for Chairman Rockefeller).

<sup>88</sup> *Id.* at 7.

<sup>89</sup> Press Release, Fed. Trade Comm’n, FTC Settlements Require Equifax to Forfeit Money Made by Allegedly Improperly Selling Information About Millions of Consumers Who Were Late on Their Mortgages: In Separate Actions, Equifax and Its Customers Will Pay a Total of \$1.6 Million (Oct. 10, 2012) (on file with the Federal Trade Commission).

## 9. Statistical Evidence of Racial Bias in Home Finance Markets

Douglas Massey is one of the preeminent demographers of national patterns of residential segregation. In a study of the relationship between racial segregation and the foreclosure crisis,<sup>90</sup> Massey and his doctoral student, Jacob Rugh, concluded that the rise in subprime lending and the ensuing wave of foreclosures was partly a result of market forces that have been well-identified in the literature, but it was also a highly racialized process. They argue that residential segregation created a unique niche of minority clients who were differentially marketed risky subprime loans that were in great demand for use in mortgage-backed securities that could be sold on secondary markets. Rugh and Massey tested this argument by regressing foreclosure actions in the top 100 US metropolitan areas on measures of black, Hispanic, and Asian segregation while controlling for a variety of housing market conditions, including average creditworthiness, the extent of coverage under the Community Reinvestment Act, the degree of zoning regulation, and the overall rate of subprime lending. They found that black residential dissimilarity and spatial isolation are powerful predictors of foreclosures across US metropolitan areas.<sup>91</sup>

### *B. Wealth Trends: The Federal Reserve, Financial Crisis, and Wealth Inequality*

#### 1. Wealth Inequality

Emmanuel Saez and Thomas Piketty have created the definitive database for analysing income inequality and wealth for 20 countries over a period of 100 years.

Piketty introduced his influential research and inequality arguments, *Capital in the Twenty-First Century*, with a blunt recognition: “Although the American Revolution established the republican principle, it allowed slavery to continue for nearly a century and legal racial discrimination for nearly two centuries. The race question still has a disproportionate influence on the social question in the United States today.”<sup>92</sup> For Piketty, “The history of the distri-

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<sup>90</sup> Rugh & Massey, *supra* note 45, at 630.

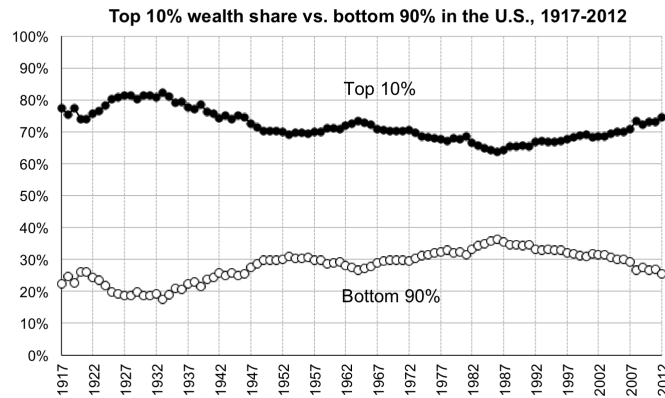
<sup>91</sup> *See id.* at 629 (“To isolate subprime lending as the causal mechanism through which segregation influences foreclosures, we estimate a two-stage least squares model that confirms the causal effect of black segregation on the number and rate of foreclosures across metropolitan areas. We thus conclude that segregation was an important contributing cause of the foreclosure crisis, along with overbuilding, risky lending practices, lax regulation, and the bursting of the housing price bubble.”).

<sup>92</sup> THOMAS PIKETTY, *CAPITAL IN THE TWENTY-FIRST CENTURY* 30 (2014).



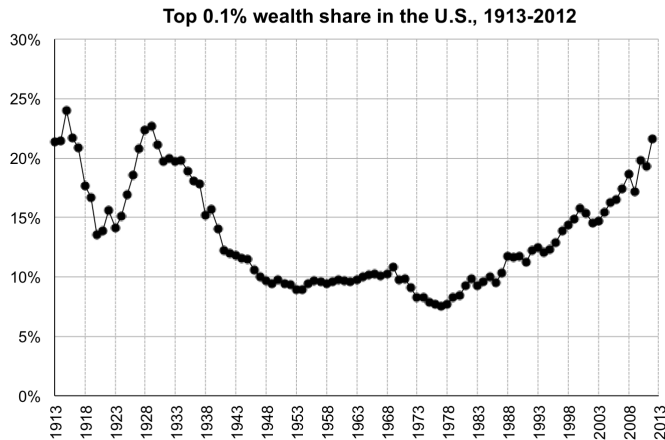
bution of wealth has always been deeply political, and it cannot be reduced to purely economic mechanisms . . . the resurgence of inequality after 1980 is due largely to the political shifts of the past several decades, especially in regard to taxation and finance.”<sup>93</sup>

## Wealth has always been very concentrated



Source: EMMANUEL SAEZ & GABRIEL ZUCMAN, *THE DISTRIBUTION OF US WEALTH, CAPITAL INCOME AND RETURNS SINCE 1913* 29 (2014).

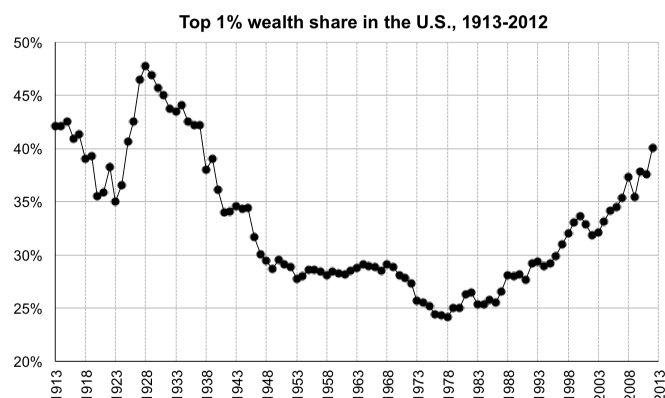
## Top 1% surge is due to the top 0.1%



Source: EMMANUEL SAEZ & GABRIEL ZUCMAN, *THE DISTRIBUTION OF US WEALTH, CAPITAL INCOME AND RETURNS SINCE 1913* 33 (2014).

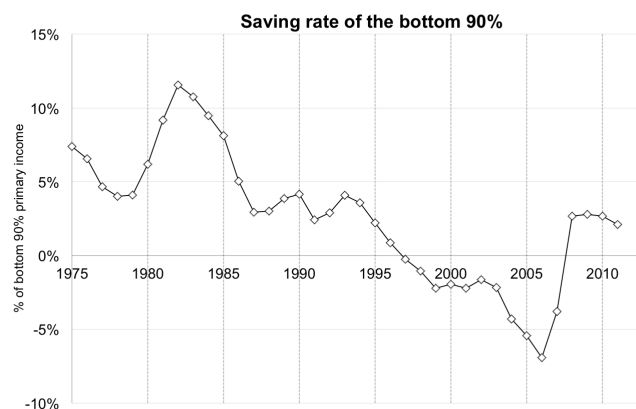
<sup>93</sup> *Id.* at 20.

## Top 1% has gained more than 10%



Source: EMMANUEL SAEZ & GABRIEL ZUCMAN, *THE DISTRIBUTION OF US WEALTH, CAPITAL INCOME AND RETURNS SINCE 1913* 30 (2014).

## The bottom 90% massively dis-saved in the decade preceding the crisis



Source: EMMANUEL SAEZ & GABRIEL ZUCMAN, *THE DISTRIBUTION OF US WEALTH, CAPITAL INCOME AND RETURNS SINCE 1913* 43 (2014).

When we think of inequality, we often think of income inequality, which has increased markedly in the past decades, with the Gini<sup>94</sup> coefficient

<sup>94</sup> The Gini index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. WORLD BANK, GINI INDEX, <http://data.worldbank.org/indicator/SI.POV.GINI>.

rising from 38.6 in 1967 to 46.8 in 2009.<sup>95</sup> However, that increase actually understates the extent of the inequality in the US economy. In fact, wealth is far less equally distributed than income. That has always been true, but the disparities have been seriously exacerbated by the recent recession. This gap is particularly visible when examined along racial identity categories.

Whites and Asians started with high net worth, while Blacks and Hispanics started with low net worth. Accordingly, among the latter two groups, the decline, though small in absolute terms, was nonetheless more financially damaging than the corresponding decline in the former two, leaving Blacks and Hispanics with 2009 median net worth of \$5,677 and \$6,325 respectively. By comparison, white households had a median net wealth of \$113,149.<sup>96</sup>

Most of the decline is attributable to losses sustained on real estate. This is especially true for Hispanic and Asian populations, which tended to be concentrated in areas particularly hard-hit by the decline in the real estate market. 83% of the decline in White median net worth was attributable to real estate, compared with 96% for Hispanics, 90% for Blacks, and 92.5% for Asians. Indeed, looking strictly at median home equity, Hispanics lost 51%, Asians 32%, Blacks 23%, and Whites 18%.<sup>97</sup>

Furthermore, Black and Hispanic populations hold a far higher percentage of net wealth in the form of real estate. Over 80% of Whites and Asians hold financial assets, compared with only 60% of Blacks and Hispanics. A substantial disparity exists across all types of financial holdings as well. Looking at stocks and mutual funds, we see that between 2005 and 2009 Hispanics lost 32% of portfolio value, Blacks an alarmingly high 71%, and Whites 9%. Asians actually gained 19%. In considering these figures, it should be remembered that in 2005, only 8% of Hispanics and 9% of Blacks had stock or mutual fund holdings, compared with 31% of Whites and 29% of Asians. In 2009, the numbers had fallen to 5%, 7%, 27%, and 24% respectively.<sup>98</sup>

To get a sense of both the starting scale of the disparities and the levels to which they have risen, consider the ratios of median net wealth. In 1995, White households were worth approximately 7 times as much as Black households. By 2004, that ratio had risen to 11. By 2009, it was 19, the highest ever recorded. Hispanic households held constant at a ratio of 7 from 1996 through

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<sup>95</sup> See LANE KENWORTHY & TIMOTHY SMEEDING, GINI GROWING INEQUALITIES' IMPACTS: GROWING INEQUALITIES AND THEIR IMPACTS IN THE UNITED STATES 8 (2013) (using an analysis "series [to] show steadily increasing inequality, with some cyclical fluctuation [and] changes in household size have had a small effect on income inequality in the United States as the lines do grow closer together (though changes in family structure might have had a larger impact . . .)").

<sup>96</sup> KOCHHAR, FRY & TAYLOR, *supra* note 19, at 1.

<sup>97</sup> *Id.* at 18.

<sup>98</sup> *Id.* at 22.

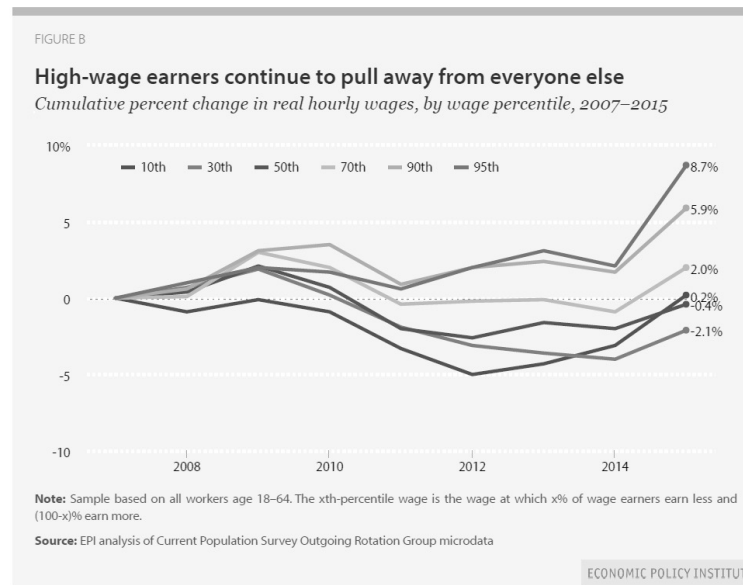
2004. By 2009, however, the ratio had increased to 15. Asian households were worth 125% of White households in 2005, but fell to 69% in 2009.<sup>99</sup>

Not only was the recession not felt equally among demographic groups—it was not felt equally within those groups. Declines in net worth occurred among both the richest and the poorest, but within all groups, the percentage of households with zero or negative net worth increased markedly, rising 36% among Whites, 35% among Hispanics, 21% among Blacks, and 58% among Asians.

By comparison, for wealthier households, although the overall 90th percentile of net worth fell by 7% between 2005 and 2009, their share of national wealth rose from 49% to 56%. Within the demographic groups, Whites saw the smallest increase, with ownership share rising from 46% to 51%, while Asians rose from 44% to 61%, Blacks from 59% to 67%, and Hispanics from 56% to 72%.

## 2. Income Inequality Trends

In addition to the wealth inequality picture discussed above, a 2016 study demonstrates that income data too reinforces the portrait of increased wealth inequality with a portrait of the highest wage earners pulling away from the rest.<sup>100</sup>



Source: Elise Gould, *infra* note 100.

<sup>99</sup> *Id.*

<sup>100</sup> See generally Elise Gould, *Wage Inequality Continued its 35-year rise in 2015* (Econ. Policy Inst., Briefing Paper #421, 2016), <http://www.epi.org/files/2016/wage-inequality-2015.pdf>.

The dramatic segmentation we see between the highest wealth holders and the rest is also reflected in data showing that the income of the highest wage earners is growing faster than the lowest wage earners. This trend reflects the higher wages earned by men.<sup>101</sup> Gould shows “that the top 1 percent grew 149.4 percent, while the bottom 90 percent grew only 16.7 percent since 1979.”<sup>102</sup>

Thomas Piketty sees danger in the forces of divergence when “top earners can quickly separate themselves from the rest by a wide margin. More important, there is a set of forces of divergence associated with the process of accumulation and concentration of wealth when growth is weak and the return on capital is high. Piketty concludes that the divergence arising from accumulation and concentration of wealth is potentially more destabilizing, and represents the principal threat to equal distribution of wealth over the long run.”<sup>103</sup>

This portrait of accumulating wealth inequality and wage inequality provide a dismal landscape of insurmountable, perpetual advantage to some and perpetual disadvantage to others. When income becomes wealth, and wealth can be translated into political power to shape the very rules of engagement in markets without boundaries or limits, a disturbing portrait of democratic instability emerges.

The Federal Reserve decision to exercise its statutory emergency powers under Section 13(3) of the Federal Reserve Act to provide never-before-seen infusions of liquidity to the unregulated financial sector that caused the crisis without any public- regarding conditions placed on this cash transfer constituted a massive redistribution of wealth to the financial sector away from taxpayers and homeowners.

### 3. Political Capital: The Wealth Advantage in Writing the Financial Rules

Existing frameworks fail to acknowledge that various forms of past state-mandated discrimination against racial minorities have shaped the current distribution of wealth and property, which in turn keep many people of color from participating fully in a privately financed political system. By using the First Amendment to undermine legislative restrictions on political contributions in cases like *Citizens United*,<sup>104</sup> the courts effectively enshrine the existing distribution of wealth as a baseline for political advantage.

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<sup>101</sup> *Id.* at 3.

<sup>102</sup> *Id.* at 7 (citing Lawrence Mishel & Will Kimball, *Wages for Top Earners Soared in 2014: Fly Top 0.1 Percent, Fly*, WORKING ECON. (Nov. 3, 2015, 12:36 PM), <http://www.epi.org/blog/wages-for-top-earners-soared-in-2014-fly-top-0-1-percent-fly/>).

<sup>103</sup> PIKETTY, *supra* note 92, at 23.

<sup>104</sup> *Citizens United v. Federal Election Commission*, 558 U.S. 310 (2010).

While income represents earnings in a particular year, wealth represents in part the accumulation of income over long periods of time. Wealthy people, including people who earn no income but have inherited a great deal of wealth, control significant resources that they may use to participate in the current campaign finance process. Further, wealth affords opportunities that significantly shape one's future income and the income of one's offspring. Wealth is a "resource available for improving life chances, providing further opportunities, securing prestige, passing status along to one's family, and influencing the political process." As indicated above, racial disparities in wealth and net worth are much broader than racial disparities in income. In 1995, the median net worth for white households (\$61,000) was over eight times greater than for African American households (\$7400) and over twelve times greater than for Latino households (\$5000). In the campaign finance context, net worth is germane because a family with a high net worth presumably has fewer obligations and more disposable resources to spend on politics. In other words, it has political capital.

The existing campaign finance system is a structural device that works to perpetuate racial disparities. Privately financed politics, framed by a history of racially discriminatory laws that have contributed to a present-day disparity in control over resources, reproduce and exacerbate racial disparities in the distribution of resources and political influence. These increasing disparities, combined with numerical minority status, make people of color especially vulnerable in the current political system. Raskin and Bonifaz criticize the existing campaign finance system not only for the inequitable access it provides to potential candidates and voters but also for the structural bias in government decision making that results.

Then there is the matter of the wealth accruing to the financial sector, which creates a synergistic political advantage in obtaining favorable legal rules that aggravate the national inequality problem. We see the growing dominance of the Finance, Insurance and Real Estate (FIRE) sector in its political contributions. FIRE has been the most prolific contributor to campaigns over the past 20 years. Since 1989, national senatorial candidates have received a total of \$431 million from the FIRE sector.<sup>105</sup>

In the 10 years leading up to the current economic crisis, the financial sector spent \$5 billion on political influence, according to a report by the Essential Information and Consumer Education Foundation. From 1998 to

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<sup>105</sup> Paul Blumenthal, *Senate Democrats, Republicans Raced to Raise Money from Finance, Insurance, Real Estate Sector in 2009*, SUNLIGHT FOUND. (Apr. 13, 2010, 4:09 PM) <http://sunlightfoundation.com/blog/2010/04/13/senate-democrats-republicans-raced-to-raise-money-from-finance-insurance-real-estate-sector-in-2009/>.

2008, investment firms, commercial banks, hedge funds, real estate companies, and insurance companies spent \$1.725 billion on political contributions and \$3.4 billion on lobbyists.<sup>106</sup>

Much of the implementation of financial reform occurs at the agency level under a *Chevron*<sup>107</sup> deference standard that allows agencies wide latitude to interpret statutes. Two significant Supreme Court campaign finance decisions, *Citizens United*<sup>108</sup> and *McCutcheon*,<sup>109</sup> make the agency implementation process especially vulnerable to the inevitable loophole industry dispensing political contributions to change the rules or eliminate regulation altogether.

#### **a. Financial Regulatory Arbitrage: Evidence of the Wealth Advantage of the Financial Sector**

The recent financial crisis hollowed out the core of American middle-class financial stability. In the wake of the financial crisis, household net worth in the United States fell by 24%, for a loss of \$16 trillion. Moreover, retirement accounts, the largest class of financial assets, saw a steep drop in value, as did house prices. These two classes of assets alone represent approximately 43% of all household wealth. The losses during the principal crisis years, from 2007 to 2009, were devastating, “erasing almost two decades of accumulated prosperity,” in the words of the Federal Reserve itself.<sup>110</sup> Beyond these direct household balance-sheet losses, one out of every four homeowners were underwater by 2009 with mortgages worth less than the value of their homes. If we add in the 3.7 to 5 million foreclosures that forced Americans to move from the economic and emotional stability of family homes, we see a portrait of dramatic financial instability in the wake of the financial collapse. What’s more, the Federal Reserve’s commitment to low interest rates, so beloved on Wall Street,<sup>111</sup> has prevented many families from rebuilding their wealth through interest on savings. These “zero-bound” interest rates are an impediment to middle-class recovery from the losses of the crisis.

<sup>106</sup> Paul Blumenthal, *Financial Sector Spent \$5 Billion on Political Influence*, SUNLIGHT FOUND. (Mar. 4, 2009, 3:05PM) <http://sunlightfoundation.com/blog/2009/03/04/financial-sector-spent-5-billion-on-political-influence/>.

<sup>107</sup> *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 844 (1984).

<sup>108</sup> *Citizens United*, 558 U.S. at 315 (2010).

<sup>109</sup> *McCutcheon v. Federal Election Commission*, 134 S.Ct. 1434, 1437 (2014).

<sup>110</sup> Binyamin Appelbaum, *Family Net Worth Drops to Level of Early '90s, Fed Says*, N.Y. TIMES, June 11, 2012, <https://nyti.ms/2kASpXW>.

<sup>111</sup> See, e.g., William D. Cohan, *Low Interest Rates Help Private-Equity Moguls and Hurt Average Americans*, NATION (Sept. 18, 2015), <https://www.thenation.com/article/low-interest-rates-help-private-equity-moguls-and-hurt-average-americans/> (explaining Wall Street investors’ affinity for near-zero rates).

By contrast, the financial sector—the cause of the crisis—has prospered from adversity, growing to 9% of GDP by 2010 even as it has become less efficient.<sup>112</sup> This percentage is one of the highest shares of GDP in the past half century and represents 29% of all profits in America.<sup>113</sup> The financial sector earns profits by pooling funds to bring net savers together with net borrowers in financial contracts, a process known as intermediation.

Economist Thomas Philippon, of New York University, found that the profits from intermediation grew from less than 2% of GDP in 1870 to nearly 6% before the economic crash of 1929.<sup>114</sup> After World War II, financiers gradually increased their share of the economy to 5% by 1980, close to what it had been before the crash. The focused deregulatory agenda of the Reagan administration and Alan Greenspan's deregulatory passions at the helm of the Fed from 1987 to 2006 swelled the balance sheets of financial firms to the high point of 9% of GDP by 2010.<sup>115</sup> Philippon writes:

[Today's] trading activities are at least three times larger than at any time in history, and though trading costs have decreased, the costs of active fund management are large . . . . [I]nvestors spend 0.67% of asset value trying (in vain, by definition) to beat the market.

In the absence of evidence that increased trading led to either better prices or better risk sharing, I must conclude that *the finance industry's share of GDP is about two percentage points higher than it needs to be and that this represents an annual misallocation of resources of about \$280 billion for the United States alone.*<sup>116</sup>

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<sup>112</sup> Thomas Philippon, *Finance vs. Wal-Mart: Why are Financial Services so Expensive?*, in RETHINKING THE FINANCIAL CRISIS 235, 235 (Alan S. Binder et al., eds., 2012).

<sup>113</sup> Kathleen Madigan, *Like the Phoenix, U.S. Finance Profits Soar*, WALL ST. J., Mar. 25, 2011, <http://blogs.wsj.com/economics/2011/03/25/like-the-phoenix-u-s-finance-profits-soar>.

<sup>114</sup> Philippon, *supra* note 112, at 236.

<sup>115</sup> *See id.* ("The cost of intermediation . . . shrinks to less than 4% in 1950, grows slowly to 5% in 1980, and then increases rapidly to almost 9% in 2010.").

<sup>116</sup> *Id.* at 245 (internal citations omitted) (emphasis added). The return to investors did not match the growth in the financial sector's share of GDP. So what did investors get for their money? According to Philippon's findings, it is impossible to beat the market in part because of high-frequency trading that locks out the ordinary investor through sophisticated high-speed computer transmission of orders with preferential cable and algorithmic access to the trading desks. *See generally* Benjamin Landy, *Graph: How the Financial Sector Consumed America's Economic Growth*, CENTURY FOUNDATION (Feb. 25, 2013), <https://tcf.org/content/commentary/graph-how-the-financial-sector-consumed-americas-economic-growth/>.



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Eric Gerding provides a persuasive account of the relationship between boom and bust cycles in financial markets and regulatory arbitrage frenzies.<sup>117</sup> Gerding argues that as bubbles form, there is increasing pressure on regulators to deregulate financial markets, reduce enforcement initiatives, repeal or water down regulations, and refuse to apply legal rules to financial innovations.<sup>118</sup> Financial market actors seek "regulatory stimulus" to extend the profitable run-up of the boom cycle through the relaxation of government oversight. This cycle, Gerding argues, creates "regulatory instability."<sup>119</sup> In his account, the effectiveness of government oversight of financial markets decreases notably during a bubble as regulators are besieged by lobbyists and industry advocates. The sophisticated gaming of the rules begins in earnest when the wealth created by the bubble makes it profitable to engage in creative risk-taking that skirts the law.

Financial regulatory arbitrage became a "blood sport" during the crisis, according to Arthur Levitt, Former Securities and Exchange Commission Chairman.<sup>120</sup> Levitt describes the harassment campaigns to which agencies with rigorous enforcement priorities were subjected:

"[O]nce word of a proposed regulation got out, industry lobbyists would rush to complain to members of the congressional committee with jurisdiction over the financial activity at issue."<sup>121</sup>

According to Levitt, these members would then "harass" the SEC with frequent letters demanding answers to complex questions and appearances of officials before Congress.<sup>122</sup> These requests consumed much of the agency's time and discouraged it from making regulations. Levitt described it as "kind of a blood sport to make the particular agency look stupid or inept or venal."<sup>123</sup>

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<sup>117</sup> ERIK F. GERDING, *LAW, BUBBLES AND FINANCIAL REGULATION* 236–75 (2014).

<sup>118</sup> *Id.* at 276–301.

<sup>119</sup> *Id.*

<sup>120</sup> FINANCIAL CRISIS INQUIRY REPORT, *supra* note 9, at 53.

<sup>121</sup> *Id.*

<sup>122</sup> *Id. See, e.g.,* Ben Protess & Susanne Craig, *Harsh Words for Regulators*, N.Y. TIMES DEALBOOK (Jan. 27, 2013), <https://dealbook.nytimes.com/2011/01/27/harsh-words-for-regulators-in-crisis-commission-report/> (describing how the Congressional commission harshly criticized various regulatory agencies and blamed them for the financial crisis).

<sup>123</sup> *Id.* at 53.

Regulatory arbitrage is alive and well. On June 8, 2017, the House of Representatives passed the Financial Choice Act to repeal major provisions of the 2010 Dodd-Frank reforms.<sup>124</sup> One provision essentially eliminates the political autonomy of the head of the Consumer Financial Protection Bureau by making the position subject to presidential appointment and removal.<sup>125</sup> Another provision allows larger banks to exchange higher financial cushion levels in exchange for elimination of several Dodd Frank regulations, such as reducing the number of mandatory “stress tests” to predict whether they could withstand extreme economic conditions without taxpayer bailouts.<sup>126</sup>

**b. A Case Study of TruPS: Arbitrage Frenzy Continued  
Even *After* the Crisis**

The case of regulatory treatment of Trust Preferred Securities (TruPS) is one important and highly profitable example of a sophisticated game of financial regulatory arbitrage. These hybrid debt securities were used to dilute the capital of bank holding companies (BHCs). After the crisis, the FDIC found that banking organizations issuing TruPS *failed* at much higher rates during the period of January 1, 2008 through November 5, 2010 than did insured banks generally or insured banks in BHCs that did not issue TruPS. The Fed approved this capital dilution strategy; the FDIC strenuously opposed its use.<sup>127</sup>

To carry out this strategy, the BHC would set up a special purpose entity (SPE) as a subsidiary that held only the junior subordinated debt (debenture) issued by the BHC to the SPE. The SPE then issued common stock and TruPS. The common stock was bought entirely by the BHC<sup>128</sup> and the TruPS were sold to investors. The cash raised from investors was then borrowed by the BHC, with the debenture in the SPE, a long term subordinated note, provided in exchange for the cash. The BHC paid interest on the debenture. The interest payments were tax deductible as a debt payment for tax purposes.

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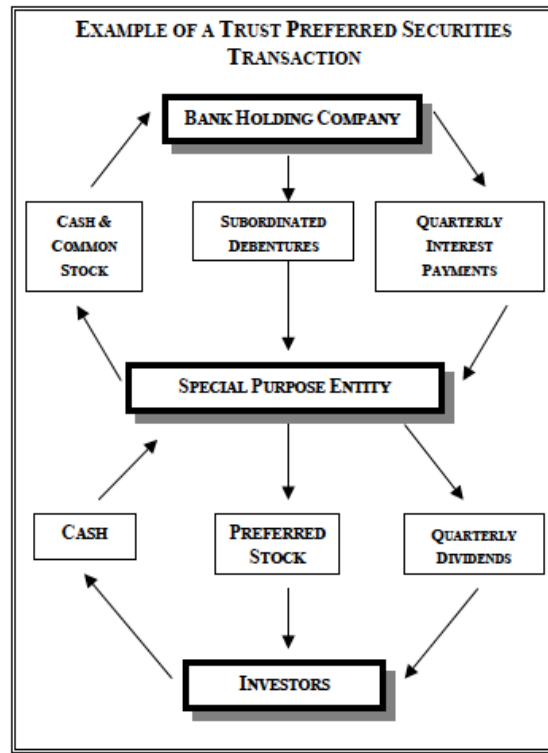
<sup>124</sup> Financial CHOICE Act of 2017, H.R. 10, 115th Cong., <https://www.congress.gov/115/bills/hr10/BILLS-115hr10eh.pdf>; Alan Rappeport, *Bill to Erase Some Dodd-Frank Banking Rules Passes in House*, N.Y. TIMES DEALBOOK (June 8, 2017), <https://nyti.ms/2sWGNlz>.

<sup>125</sup> Rappeport, *supra* note 124.

<sup>126</sup> *Id.*

<sup>127</sup> Letter from Donald E. Powell to Alan Greenspan, Chairman, Bd. of Governors of the Fed. Reserve Sys. 3-9 (July 2, 2004) (on file with author) [hereinafter Powell Letter] (providing, on behalf of the FDIC, strong objections to treating trust preferred securities as Tier 1 capital).

<sup>128</sup> This accounting trick allows the TruPS to be treated as a minority interest of the BHC and consolidate the balance sheet of the subsidiary SPE and count it as Tier 1 capital. Powell Letter, *supra* note 127, at 2; Todd H. Eveson, *Financial and Banking Holding Company Issuance of Trust Preferred Securities*, 6 N.C. BANKING INST. 315, 323–329 (2002).



Source: Todd H. Eveson, *Financial and Banking Holding Company Issuance of Trust Preferred Securities*, 6 N.C. BANKING INST. 315, 325 (2002).

The debt issued by the BHC was in the form of a debenture. Filed under the Securities Act of 1933, most of them fell under the exception of registration.<sup>129</sup> For the regulatory arbitrage to work, the features of the debenture had to mimic the characteristic of common equity: unsecured, subordinated to the rights of other creditors, with long maturities (30 years) and long periods of deferral. Accordingly, the TruPS issued by the SPE had to be exactly equal to the aggregate face value of the BHC debentures it held. It also mirrored the terms (frequency, amount) of the debentures so that interest payments on the debentures received by the trust were immediately declared as a dividend to the holders of the trust. The SPE did nothing to the funds that flowed into it other than pass them through to its security holders.<sup>130</sup>

<sup>129</sup> “Because of the 144A status of TruPS CDOs, however, trustees do not allow Intex to make all information available to analysts as they do with public deals. Most important, analysts not specifically investing in TruPS CDOs generally do not know the issuer of TruPS going into each pool.” Larry Cordell, Michael Hopkins & Yilin Huang, *The Trust Preferred CDO Market: From Start to (Expected) Finish* 16 (Research Department, Fed. Reserve Bank of Philadelphia, Working Paper No. 11-22, 2011).

<sup>130</sup> Eveson, *supra* note 128, at 327-38.

In order to formalize the promise that funds paid into the trust as interest on the debentures would be paid out to the holders of the TruPS, a Preferred Securities Guarantee was signed. This particular guarantee served two functions: (1) bridge the gap in privity between the holding company and the eventual holders of the TruPS (in large scale public offering the BHC executes a guarantee for the benefit of a guarantee trustee that acts in the collective interest of the holders of the TruPS) and (2) avoid the classification as an investment company under the 1940 Investment Company Act.<sup>131</sup>

For the BHC, issuing TruPS meant cheap equity: while the cost of an initial common equity offering was between 11% and 7%, the cost of preferred stocks was 2.79%.<sup>132</sup> Additionally, the issuing entity did not dilute the existing shareholders' power because it did not grant shares with traditional voting rights.<sup>133</sup> Finally, the debt quality of the security allowed the BHC to treat the interest paid to the SPE as tax deductible.<sup>134</sup> Thus, the true economic substance of the TruPS was that the BHC was financing itself with subordinated debt, responding more to a debt obligation than a form of equity.<sup>135</sup>

For investors (typically institutional, fixed-income investors, hedge funds and off-balance sheet Structured Investment Vehicles) TruPS represented a higher yield than straight debt issued by investment-grade borrowers. They provided a protection during bankruptcy compared to common equity because investors were paid before common stockholders, and the investors' portfolios (of the ones subject to regulatory supervision) were deemed more stable.<sup>136</sup>

On October 21, 1996,<sup>137</sup> the Federal Reserve expressly authorized the BHC to include TruPS as up to 25% of core capital for their Tier 1 regulatory capital. Immediately thereafter, most of the large BHCs issued TruPS up to the permitted limit of Tier 1 capital<sup>138</sup> and the issuance remained steady until 2000 when Salomon Smith Barney issued the first TruPS Collateralized Debt Obligation (CDO).<sup>139</sup>

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<sup>131</sup> *Id.* at 328–29.

<sup>132</sup> Candemir Baltali & Joseph Tanega, *Basel III: Dehybridization of Capital*, 8 N.Y.U. J.L. & BUS. 23, 25 (2011).

<sup>133</sup> Eveson, *supra* note 128, at 316.

<sup>134</sup> *Id.*

<sup>135</sup> Powell Letter, *supra* note 127, at 4.

<sup>136</sup> FDIC SUPERVISORY INSIGHTS, *supra* note 17, at 6.

<sup>137</sup> Press Release, Bd. of Governors of the Fed. Res. Sys. (Oct. 21, 1996), <https://www.federalreserve.gov/boarddocs/press/bcreg/1996/19961021/default.htm>.

<sup>138</sup> Trust Preferred Securities first appeared in 1993 but were not used by banks until the Fed's authorization in 1996. See FDIC SUPERVISORY INSIGHTS, *supra* note 17, at 3 (discussing the usage of and reasons for Tier 1 capital in BHCs).

<sup>139</sup> MOODY'S, MOODY'S APPROACH TO RATING U.S. BANK TRUST PREFERRED SECURITY CDOs 1 (2004).

TruPS CDOs represented an opportunity for small and medium size BHCs (unrated or poorly-rated) because TruPS were too expensive to issue on their own. Conversely, if TruPS of small banks were put together in a big pool, tranced and sold off as rated bonds to investors, the costs could be reduced significantly and the investors would rely on the high ratings.<sup>140</sup>

Fitch reported that since the year 2000, 1,813 banking entities issued TruPS that were purchased by TruPS CDOs making a total of approximately \$38 billion.<sup>141</sup> Additionally, to provide most of the deals' inputs, small banks also loaded up on the structured securities they produced.<sup>142</sup> The express authorization of regulators for insured institutions to invest in their own TruPS<sup>143</sup> created another layer of interconnectedness between financial institutions that created systemic risk once the crisis ignited. As the FDIC recounted in 2010, "banking organizations issuing TruPS failed at much higher rates during the period January 1, 2008 through November 5, 2010 than did insured banks generally or insured banks in BHCs that did not issue TruPS."<sup>144</sup>

Beginning in 2003, after the Enron scandal, the Financial Accounting Standards Board (F.A.S.B.), a self-regulatory organization, began reviewing the consolidation rules under Accounting Research Bulletin No. 51, and the treatment of Special Purpose Vehicles. This revision led to the issuance of FIN 46 and FIN 46R; thereafter, the BHC must reflect the deeply subordinated note issued to the SPE on its consolidated balance sheet, but it could not report the TruPS as a minority interest in a consolidated subsidiary.<sup>145</sup> The new rules caused uncertainty among the financial institutions about how the Federal Reserve would treat these securities in capital requirements. However, the

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<sup>140</sup> See generally Jeff Horwitz, *TruPS Leave Buyers in Limbo*, 174 AM. BANKER 1 (determining that high credit rating of TruPS CDOs was based on the premise that "geographically diverse banks had never defaulted at significant rates"). Therefore, rating agencies required only a thin buffer of collateral, barely 2%, to protect a deal's investment-grade tranches. *Id.*

<sup>141</sup> FDIC SUPERVISORY INSIGHTS, *supra* note 17, at 4.

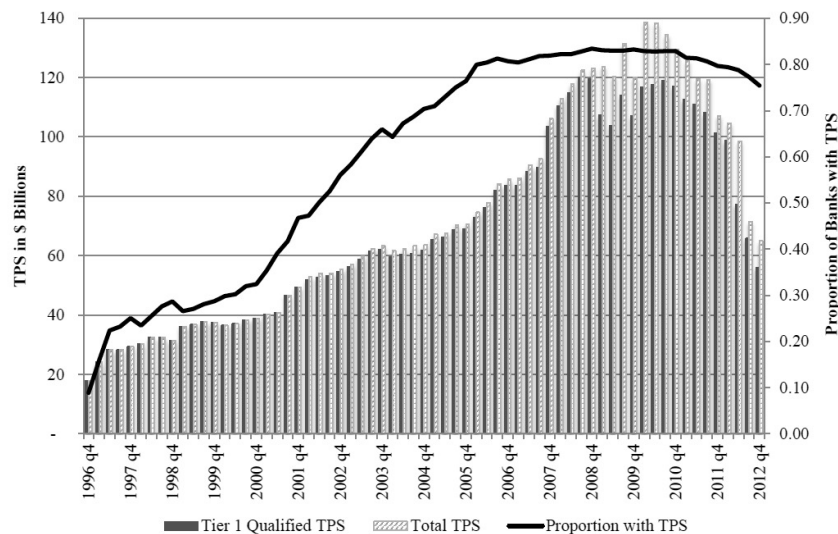
<sup>142</sup> See Cordell et al., *supra* note 118, at 3–4 ("Experts have estimated that banks have purchased some \$12 billion of TruPS CDOs, mostly in mezzanine classes of the CDOs, which means that banks became a primary investor in the debt of the banking industry.").

<sup>143</sup> See OCC, Interpretative Letter #777, 12 U.S.C. 24(7) 92 (Apr. 1997) (authorizing national banks to invest in TruPS if they meet the definition of "investment securities" according to regulation 12 C.F.R. Section 1.2(e), limit: 10% of capital and surplus (as a Type III security)); FDIC, Financial Institution Letter FIL-16-99 (Feb. 19, 1999) [hereinafter FDIC Letter] ("[Section 24 of the Federal Deposit Insurance Act and the corresponding regulations] do not restrict an insured state bank's authority under state law to invest in trust preferred stock." The investment must come within the same definition of investment security used by the OCC. FDIC regulated institutions are *not* subject to the 10% limit); OTS, Third Bulletin 73(a) (Dec. 18, 2001) (explaining that thrifts may invest in TruPS up to 15% of its total capital).

<sup>144</sup> FDIC SUPERVISORY INSIGHTS, *supra* note 17, at 14.

<sup>145</sup> Powell Letter, *supra* note 127, at 2.

uncertainty was resolved very quickly when, on May 6, 2004, the Federal Reserve proposed and then approved a regulation allowing the TruPS to maintain the Tier 1 status and only lowered from 25% to 15% the limit of TruPS allowable in Tier 1 for internationally active holding companies.<sup>146</sup>



Source: Nicole Boyson, Rüdiger Fahlenbrach & René Stulz, *Why do Banks Practice Regulatory Arbitrage? Evidence from Usage of Trust Preferred Securities* at 4 (Nat'l Bureau of Econ. Research, Working Paper No. 19984, 2014), available at <http://www.nber.org/papers/w19984.pdf>

As a consequence, TruPS and TruPS CDOs grew, reaching a total outstanding of \$140 billion in the first quarter of 2010. Nearly 90% of the banks had some TruPS in their capital structures, having issued TruPS themselves or having bought other banks' TruPS as investments.

As Nicole Boyson et al observe, "it was more common for banks to use [TruPS] as a [marginal funding mechanism, so that] when they made acquisitions or [had] considerable internal growth that would have reduced their Tier 1 capital ratios, [they] used [TruPS] instead of equity to maintain their prior Tier 1 capital ratios."<sup>147</sup> BHC clearly used TruPS to pursue aggressive internal and external growth. And while most research leading to the crisis painted a picture of very safe and sound banks relying on the fact that banks were holding more capital than required, they failed to uncover the true quality of BHC capital.

The fundamental concept to understand about this particular regulatory arbitrage that BHCs gamed, was that this complex transaction raised a significant issue of the insured banks' safety and soundness. Tier 1 capital is considered

<sup>146</sup> *Id.* at 1.

<sup>147</sup> *Id.* at 4.

a core capital element, fully available to absorb losses while the banking organization is under stress. TruPS definitively did not have the qualities of a core capital element. As the FDIC had concluded, these securities were a liability of the parent BHC and—in spite of their characteristics—they could not absorb losses as equity does and therefore could not count as Tier 1 capital.<sup>148</sup>

Significantly, the BHC's diluted and worthless capital put pressure on FDIC-insured subsidiaries. "[I]nvestors in trust preferred securities have a contractual right to full payment of principal and interest and, if such payments are deferred, their claim on the trust both cumulates and compounds. The requirement to service this obligation can place undue pressure on other entities within a BHC, including FDIC-insured bank subsidiaries, regardless of whether such payments are in the subsidiary bank's financial interest. While the ability to defer dividend payments may provide an organization with temporary relief, there is strong market pressure to keep such payments current, or to bring them current in the event of payment deferral."<sup>149</sup>

Thus, it is not surprising to see studies where TruPS usage was linked to poorer performance and more probability of default, observing patterns of riskier behavior among the TruPS users. As the FDIC notes, "[t]he banking industry has experienced significant write-downs of mezzanine bond-holdings. Over the past two years, the failure of federally insured depository institutions was due largely, or in part, to their investment in TruPS CDOs."<sup>150</sup>

Finally, it is not surprising to discover that banks with a higher proportion of TruPS in their Tier 1 capital were significantly more likely to receive funds from the Capital Purchase Program, a part of the Troubled Asset Relief Program which cost taxpayers \$205 billion between October 2008 and December 2009.<sup>151</sup>

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<sup>148</sup> See Powell Letter, *supra* note 127, at 7 ("Even in the absence of deferral, trust preferred securities are 'permanent' only in the sense of being binding long-term commitments by the organization to make regular fixed dividend payments for the life of the debenture, which is typically 30 years or less. Trust preferred securities cannot absorb losses on a going-concern basis, because they give rise to a fixed liability that can only be avoided in the event of default. Deferral of dividends can conserve cash flow for five years but this would not offset any losses as the dividend obligation continues to accrue.").

<sup>149</sup> *Id.*

<sup>150</sup> FDIC SUPERVISORY INSIGHTS, *supra* note 17. See also Powell Letter, *supra* note 127, at 6 ("In times of financial distress at the banking level, the debt service requirements of trust preferred securities has the potential to force the bank to increase its risk profile in order to increase cash liquidity for dividend payments, divert income from critical internal investment needs, and to take other actions that lead them away from safe and sound banking practices."); FDIC SUPERVISORY INSIGHTS, *supra* note 17.

<sup>151</sup> See PEIYI YU & BAC VAN LUU, LESSONS FROM THE COLLAPSE IN HYBRID CAPITAL SECURITIES 23 ("Institutions that had almost used up their allowance of innovative Tier 1

In the naïve belief that after the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and, more specifically, Section 171 (generally referred to as the Collins Amendment), banks will now be safe and sound—and that the hybrid securities will never again be part of the core capital elements of insured banks and bank holding companies—new regulations keep allowing this toxic instrument to survive and propagate, achieving levels of financial leverage and activities impermissible otherwise.<sup>152</sup>

## II. HOW DID THE FED CONTRIBUTE TO THE INEQUALITY PROBLEM?

Did the Federal Reserve’s aggressive pre-crisis deregulation of capital requirements, its off-balance-sheet permissions, and its enthusiasm for complexly structured financial instruments have an impact on post-crisis economic inequality trends?<sup>153</sup> Few scholars have asked this basic question.<sup>154</sup> The Fed is the most powerful economic institution in the world. A close examination of its recent policies will shed some light on the question of the connection between Fed policies and the growing problem of economic inequality. This paper seeks to stimulate that necessary conversation.

Former Fed Governor Sarah Bloom Raskin<sup>155</sup> was the intellectual leader of the effort to bring inequality analysis to the fore in Fed thinking,

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securities issuance (and thus had little leeway to issue new securities) were more likely to require a government bailout.”).

<sup>152</sup> See Joint Press Release, Bd. of Governors of the Fed. Reserve, Agencies Approve Interim Final Rule Authorizing Retention of Interests in and Sponsorship of Collateralized Debt Obligations Backed Primarily by Bank-Issued Trust Preferred Securities, (Jan. 14, 2014) (“Five federal agencies on Tuesday approved an interim final rule to permit banking entities to retain interests in certain collateralized debt obligations backed primarily by trust preferred securities (TruPS CDOs) from the investment prohibitions of section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, known as the Volcker rule.”).

<sup>153</sup> Frank Partnoy & Lynn E. Turner, *Bring Transparency to Off-Balance Sheet Accounting*, in *MAKE MARKETS BE MARKETS* 85 (2010).

<sup>154</sup> An important exception is the work of economist, Gary A. Dimski, who argued that the root causes of the subprime crisis were (1) the systemic exclusion of racial minorities from participation in mortgage-finance, (2) the creation of new financial assets designed to generate net income for banks, and (3) the “unique global macroeconomic position” of the United States. Gary A. Dimski, *Racial Exclusion and the Political Economy of the Subprime Crisis*, 17 *HIST. MATERIALISM* 149, 150–51 (2009). I discussed the question of redistribution up in my paper presented to the LatCrit Conference in 2013. In addition, there is a growing chorus of journalistic commentary in the blogs and within both the conservative and liberal think tanks that does focus on the Fed as a vehicle of wealth redistribution that fueled inequality.

<sup>155</sup> Sarah Bloom Raskin was sworn in as the first woman Deputy Secretary of Treasury in 2014, after she stepped down as a member of the Board of Governors. See Press Release, U.S. Dep’t of the Treasury, Sarah Bloom Raskin Sworn in as Deputy Secretary (Apr. 11,



through a series of intellectually stimulating speeches and policy papers.<sup>156</sup> Raskin has repeatedly explored the impact of monetary and bank regulatory policy on unemployment, economic marginalization, and financial vulnerability among millions of moderate- and low-income Americans. In an April 2013 speech she addressed “an issue of growing saliency that macroeconomic models used at central banks and by academics have not traditionally emphasized—specifically, how such economic marginalization and financial vulnerability, associated with stagnant wages and rising inequality, contributed to the run-up to the financial crisis and how such marginalization and vulnerability could be relevant in the current recovery.”<sup>157</sup>

By contrast, Janet Yellen, the new Federal Reserve chair, succinctly endorsed conventional macroeconomic wisdom about the role of the Fed in economic inequality. During her November 2013 confirmation testimony, she told the senators:

Economists have spent a lot of time trying to understand what is responsible for widening inequality. Many of the underlying factors are things that are outside the Federal Reserve’s ability to address . . . . There is a lot of research, a lot of debate about exactly what the causes of this problem are, perhaps having to

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2015) (describing the swearing-in ceremony of Raskin and previous position on the Board of Governors); Annie Lowrey, *Raskin Would Be the First Female Deputy at Treasury*, N.Y. TIMES, July 31, 2013, <https://nyti.ms/2kD2WSp> (describing Raskin’s position as the first female deputy).

<sup>156</sup> See generally Sarah Bloom Raskin, Member, Bd. of Governors of the Fed. Reserve Sys., Remarks at the National Community Reinvestment Coalition Annual Conference (Mar. 22, 2013) (discussing current recovery’s job creation; “how the absence of a substantial number of new high-paying jobs, when combined with changes in the landscape for financial services, affects access generally to affordable, sustainable credit”; and “the monetary, supervisory, and regulatory touchpoints in which the situation and prospect of low- and moderate-income working Americans can be addressed”); Sarah Bloom Raskin, Member, Bd. of Governors of the Fed. Reserve Sys., Remarks at Building a Financial Structure for a More Stable and Equitable Economy, the 22nd Annual Hyman P. Minsky Conference on the State of the U.S. and World Economies (Apr. 18, 2013) (“[E]xamining . . . how such economic marginalization and financial vulnerability, associated with stagnant wages and rising inequality, contributed to the run-up to the financial crisis and how such marginalization and vulnerability could be relevant in the current recovery.”); Sarah Bloom Raskin, Member, Bd. of Governors of the Fed. Reserve Sys., Remarks at the Society of Government Economists and the National Economists Club (May 16, 2013) (“[I offer] my assessment of recent economic developments and the economic outlook, and . . . the actions that the Federal Reserve has been taking, in light of its view of developments and the outlook, to support the economic recovery.”).

<sup>157</sup> See Raskin, *supra* note 156.

do in part with the nature of technological change, with . . . globalization and the decline of unions. The solutions involve a multitude of things including . . . early childhood education. *What can the Fed do?* (emphasis added) We cannot change all of those trends.<sup>158</sup>

Yellen shares the liberal economic view that while inequality is bad, the Federal Reserve is not responsible for the primary drivers of this inequality: education, technological innovation, and globalization. In the transcripts and minutes of the 2007-9 meetings of the Federal Open Market Committee (FOMC), Yellen shows her talent as a prescient, reliable evaluator of the proper balance the Fed should bring to evaluating the conflicting economic signals of inflation and unemployment. Her empathic observations about the human toll of unemployment reveal a genuine personal commitment to the Fed's statutory mandate to lower unemployment, and especially to address the devastating effects of long-term unemployment.<sup>159</sup> In a paper co-authored with, Nobel Prize-winning economist George Akerlof, her husband, they write that "[p]olicy makers should be compelled to take action given the serious costs of long-term unemployment when overall unemployment is already high. A week of unemployment is worse when it is experienced as part of a longer spell."<sup>160</sup>

Thomas Piketty argues that the Fed is in charge of redistribution of wealth:

[I]t is important to realize that central banks do not create wealth as such; they redistribute it. . . . Rapid execution is the principal strength of the monetary authorities. The weakness of central banks is clearly their limited ability to decide who should receive loans in what amount and for what duration.<sup>161</sup>

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<sup>158</sup> To be fair, it is conventional wisdom that nominees for high-level federal positions hew closely to the conventional wisdom of the agency for which they have been nominated. Therefore, Yellen's answer is reasonable in the circumstance. However, it does provide a concise statement of Fed orthodoxy on inequality. Yellen Nomination, *supra* note 1, at 32.

<sup>159</sup> See, e.g., FED. RES. SYS., MEETING OF THE FEDERAL OPEN MARKET COMMITTEE ON SEPTEMBER 22-23, 2009 95-96 (2009), <http://www.federalreserve.gov/monetarypolicy/files/FOMC20090923meeting.pdf> (providing Ms. Yellen's observations on the state of financial markets at the time).

<sup>160</sup> Craig Torres & Joshua Zumbrun, *Yellen's Focus on Unemployment Adopted by Fed After Crisis*, BLOOMBERG BUS., Apr. 25, 2013, <http://www.bloomberg.com/news/articles/2013-04-25/yellen-s-unemployment-focus-adopted-by-bernanke-fed-after-crisis>.

<sup>161</sup> PIKETTY, *supra* note 92, at 550, 552.

The problem is that central banks lack the democratic legitimacy. Piketty further argues that “central banks . . . can redistribute wealth quickly and massively, but they can also be very wrong in their choice of targets.”<sup>162</sup> Piketty concludes that the problem is not one of technical impossibility, but of democratic governance.

Despite the laudable empathy for the unemployed, Yellen’s stance reveals critical analytic failures. During the period leading up to the financial crisis of 2008, the Federal Reserve was a powerful matrix for economic inequality through both action and inaction. My argument here relies upon recognizing a structural continuity between the Fed’s pre-crisis deregulatory agenda and its now legendary post-crisis intervention. The pre-crisis deregulation set the stage for the magnitude of the uncontrolled, unanticipated collapse of the interdependent networks created by that deregulatory agenda.

*A. Cognitive Narrowness: Framing the Narrative of Miscalculation*

“Some important lessons emerge from the story [of the Great Depression]. One lesson is that ideas are critical.”<sup>163</sup>

*- Ben Bernanke, Former Chairman of the Federal Reserve*

“People who belong to a group that makes decisions have a tendency to self-censor and not express ideas that don’t conform to the perceived professional standard. They’re too professional. They are not creative and imaginative in their approach.”<sup>164</sup>

*- Robert Shiller, 2013 Nobel Laureate for Economic Sciences*

The Federal Reserve decision-making process and output displayed a persistent “cognitive narrowness” before, during, and after the crisis. In my view, the dynamic pattern of “interdependent network theory,” developed first in physics and biology, provides a powerful tool for explaining the suddenness of the financial collapse and the amplification of the impact beyond the subprime mortgage market.

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<sup>162</sup> *Id.* at 552.

<sup>163</sup> *Money, Gold, and the Great Depression*, *supra* note 187.

<sup>164</sup> Robert Stowe England, *Robert Shiller Says Markets Have Become More Prone to Bubbles*, INSTITUTIONAL INVESTOR (Feb. 27, 2014), <http://www.institutionalinvestor.com/article/3313677/asset-management-macro/robert-shiller-says-markets-have-become-more-prone-to-bubbles.html> (providing excerpts from the author’s interview with Robert Schiller).

Former Chair Ben Bernanke's testimony to the Financial Crisis Inquiry Commission (FCIC) reveals the devastating impact of cognitive narrowness at the very top of the Fed. Bernanke testified, on one hand, that the Fed could not have anticipated the financial crisis or its severity because the crisis was "a perfect storm," an unpredictable Act of God. On the other hand, in response to a question about the Fed's lack of aggressiveness in regulating the mortgage market during the steep ascent of housing prices, Bernanke admitted that the failure to rein in abusive lending practices "was the most severe failure of the Fed in this particular episode."<sup>165</sup>

In this section, I offer a novel explanation of how the Fed became a matrix of inequality. In my discussion, I rely on the two concepts mentioned above, concepts that have received scant attention in the vast literature of legal scholarship on the financial crisis. First, I explain cognitive narrowness and then explore its impact on Federal Reserve decision-making. Second, I introduce interdependent network theory<sup>166</sup> as a useful conceptual tool to explain how Fed policy before the crisis created several interdependent networks that converged beyond its cognitively narrowed perception of the growing risk. The interdependent networks began forming on an indispensable foundation of aggressive deregulation that included both *affirmative permissions* to shift risk

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<sup>165</sup> FINANCIAL CRISIS INQUIRY REPORT, *supra* note 9, at xvii.

<sup>166</sup> See generally PRASANNA GAI, SYSTEMIC RISK: THE DYNAMICS OF MODERN FINANCIAL SYSTEMS (2013). I have relied on the work of Gai, in the developing field of financial network theory. Gai's contribution to the finance literature in this work has been summarized as follows:

This book opens new ground in the study of financial crises. It treats the financial system as a complex adaptive system and shows how lessons from network disciplines - such as ecology, epidemiology, and statistical mechanics - shed light on our understanding of financial stability. Using tools from network theory and economics, it suggests that financial systems are robust-yet-fragile, with knife-edge properties that are greatly exacerbated by the hoarding of funds and the fire sale of assets by banks. The book studies the damaging network consequences of the failure of large inter-connected institutions, explains how key funding markets can seize up across the entire financial system, and shows how the pursuit of secured finance by banks in the wake of the global financial crisis can generate systemic risks. The insights are then used to model banking systems calibrated to data to illustrate how financial sector regulators are beginning to quantify financial system stress.

to off-balance-sheet dark zones and *inaction* in the failure to police the spreading virus of subprime and racial exploitation in mortgage lending. The interdependent network framework is useful in explaining how cognitive narrowness and race were linked in an interdependent set of “nodes”<sup>167</sup> that came together during the crisis, because it offers a physical image of the catastrophic, cascading results that produce exponentially large failures exceeding the sum of the individual parts.

### 1. Key Federal Reserve Actions that Increased Economic Inequality

In what follows, I identify three major categories of Federal Reserve action that increased economic inequality during the financial crisis of 2008:

#### a. Category I: Deregulation

First and foremost, the Federal Reserve undertook a program of systematic deregulation and non-enforcement of legal rules that would have prevented the proliferation of the unsustainable subprime mortgages that formed the heart of the crisis.

Second, the Federal Reserve adopted a series of explicit off-balance-sheet permissions that allowed regulated banks and their holding companies to move the origination and distribution system for home loans off the bank balance sheet into unregulated entities that facilitated the growth of a massive “shadow” banking sector. Hidden from government view, this shadow sector was especially vulnerable to systemic panics and runs because it lacked three indispensable safeguards that stabilized the traditional banking system: regulated capital cushions, transparent transactions, and primary supervisory oversight of the quality of its transactions.<sup>168</sup>

<sup>167</sup> I use the term “nodes” in the context of the 2008 financial crisis to capture the list of interactive relationships of off balance sheet deregulation, interconnection between formal banks and the shadow bank system consisting of maturity transformation through short term financing provided by money market funds and asset backed commercial paper facilities.

<sup>168</sup> Fed Governor Tarullo has taken the lead on the discussion of what regulatory approach is best to address the systemic risks arising from the interconnected, dark balance sheets that remain in the shadow sector six years after the crisis. Tarullo has spoken often about this development. See Daniel K. Tarullo, Member, Bd. of Governors of the Fed. Reserve Sys., Remarks at the Americans for Financial Reform and Economic Policy Institute Conference (Nov. 22, 2013) (“Support provided for shadow banking activities may be either explicit or implicit. In some cases, there are explicit contractual provisions for credit enhancements and liquidity support. In other cases, the support is implicit, based on a bank’s historical pattern of providing support or a belief among investors that a bank will provide support to maintain the value of its franchise. In the lead-up to the crisis, explicit and implicit commitments by

### b. Category II: Cognitive Narrowness

Cognitive narrowness provides a comprehensive explanation of the Fed's failure to recognize that the pervasive interconnectedness of the invisible shadow sector and the formal sector posed an imminent threat to the stability of the entire global financial system when housing prices began to decline in 2005. Most scholarly analyses,<sup>169</sup> government investigations,<sup>170</sup> and post-crisis autopsies<sup>171</sup> have concluded, in hindsight, that pervasive interconnection between the

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regulated banking firms to shadow banks often combined to create the assumption that the liabilities of such entities were risk-free. This perception led to an underpricing of the risks embedded in these money-like instruments, making them an artificially cheap source of funding and creating an oversupply of these instruments that contributed to systemic risk.”); Craig Torres & Jeff Kearns, *Tarullo Backs More Capital for Firms Relying on Repo Funds*, BLOOMBERG, (Nov. 22, 2013) <http://www.bloomberg.com/news/2013-11-22/tarullo-backs-more-capital-for-firms-relying-on-repo-funding.html> (“Shadow banking, including money market funds and off balance sheet investment vehicles, grew \$5 trillion last year to about \$71 trillion, the Financial Stability Board, a global financial policy group based in Basel, Switzerland, said last week.”); Emily Stephenson & Douwe Miedema, *Fed's Tarullo: Short-term Bank Funding Should Be Top Regulatory Focus*, REUTERS, Sept. 20, 2013, <http://www.reuters.com/article/2013/09/20/us-feds-tarullo-idUSBRE98J0OY20130920> (“[Regulators are] beefing up capital requirements and cracking down on short-term funding [and] are looking at ways to prevent banking activities from migrating away from regulated entities and into so-called ‘shadow banks.’”).

<sup>169</sup> See generally Ricardo J. Caballero, & Alp Simsek, *Fire Sales in a Model of Complexity* (Mass. Inst. of Tech., Working Paper No. 15479, 2009); Rama Cont et al., *Network Structure and Systemic Risk in Banking Systems*, OPUS FINANCE 1; Prasanna Gai et al., *Complexity, Concentration and Contagion*, 58 J. MONETARY ECON. 453 (2011); Maarten R.C. van Oordt & Chen Zhou, *Systematic Risk under Adverse Market Conditions* (De Nederlandsche Bank and Erasmus University Rotterdam, Working Paper, 2011); Nikola Tarashev et al., *The Systemic Importance of Financial Institutions*, BIS QUARTERLY REV. 75 (2009); Lev Ratnovski, *Bank Liquidity Regulation and the Lender of Last Resort* (Bank of England and University of Amsterdam, Working Paper 2007); Rama Cont et al., *Too Interconnected to Fail: Contagion and Systemic Risk in Financial Networks*, (Columbia Univ. & Université de Paris, 2009); Franklin Allen et al., *Financial Connections and Systemic Risk* (Wharton, 2010); Viral V. Acharya et al., *Measuring Systemic Risk* (Federal Reserve Bank of Cleveland, Working Paper 10-02, 2010).

<sup>170</sup> See generally CARL LEVIN, U.S. SENATE PERMANENT SUBCOMMITTEE ON INVESTIGATIONS: COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS, WALL STREET AND THE FINANCIAL CRISIS: ANATOMY OF A FINANCIAL COLLAPSE MAJORITY AND MINORITY STAFF REPORT (2011).

<sup>171</sup> See generally U.S. GOV'T ACCOUNTABILITY OFF., GAO-13-180, FINANCIAL CRISIS LOSSES AND POTENTIAL IMPACTS OF THE DODD-FRANK ACT (2013); U.S. GOV'T ACCOUNTABILITY OFF., GAO 14-18, GOVERNMENT SUPPORT FOR BANK HOLDING COMPANIES: STATUTORY CHANGES TO LIMIT FUTURE SUPPORT ARE NOT YET FULLY IMPLEMENTED (2013); U.S. GOV'T ACCOUNTABILITY OFF., GAO 10-16, TROUBLED ASSET RELIEF PROGRAM: ONE YEAR LATER: ACTIONS ARE NEEDED TO ADDRESS REMAINING TRANSPARENCY AND ACCOUNTABILITY CHALLENGES (2009).

formal banking system and the shadow sector led to an exponential increase in the scope of the damage to the financial sector and the overall economy, but I go beyond the consensus structural analysis of the causes of the crisis.

I argue that an important deficit in Federal Reserve leadership<sup>172</sup> was its blindness<sup>173</sup> to the nation's history of racial discrimination in housing.<sup>174</sup> This lack of historical understanding proved lethal. The crisis-period transcripts of the meetings of the FOMC show that the Board repeatedly underestimated the near cataclysmic effects of the looming global subprime crisis because of its deeply mistaken belief that if the housing bubble burst, the effect would be an easily contained recession, on the scale of the collapse of the asset bubble of the Silicon Valley technology start-ups. The dot-com comparison is one significant marker of how far afield the limited cultural and social imagination of the Fed would carry it from recognizing the role of racially discriminatory lending in the American housing market.

Chairman Bernanke's memoir captures an important dimension of this blindness. Bernanke recognized that although the Fed saw the pieces of the puzzle that would create the financial crisis, "but we failed to understand—'failed to imagine' might be a better phrase—how those pieces would fit together to produce a financial crisis."<sup>175</sup>

### c. Category III: The Fed's Post-Crisis Bailouts and Emergency Lending

The Fed's crisis response "saved" the global economy by distributing \$12 trillion in emergency lending to non-banks and nothing directly to homeowners to enable them to restructure flawed mortgage loans and remain in their homes. This decision contributed to the growth of inequality after the

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<sup>172</sup> The Federal Open Market Committee (FOMC) is a body of the United States Federal Reserve System. Composed of twelve members (the seven members of the Board of Governors, the president of the New York Fed and four other Reserve Bank presidents who serve on a rotating basis), the FOMC is in charge of carrying out one of the most important roles in the U.S. economy: the formulation and conduct of monetary policy through open market operations (buying and selling of federal government bonds in order to influence the money supply and interest rate).

<sup>173</sup> See, for example, my discussion of Federal Reserve lack of knowledge regarding history of racial discrimination in housing, *infra* notes 7–11.

<sup>174</sup> Gordon, *supra* note 40, at 186; see Ben Brantley, *No Rest For the Weary: 'Raisin in the Sun' Brings Denzel Washington Back to Broadway*, N.Y. TIMES, Apr. 4, 2014, at C1 (referring to a Twitter comment that claimed that Lorraine Hansberry's iconic play about the African American longing for home ownership should be an indispensable component of the orientation for every new Fed Board member).

<sup>175</sup> BEN S. BERNANKE, *THE COURAGE TO ACT* 82 (2015).

crisis by draining wealth in housing from homeowners in foreclosure while distributing wealth to the financial sector.<sup>176</sup> According to one estimate, real household wealth declined by \$19 trillion between July 2007 and January 2009, and the Fed reported that median family net worth fell 38.8%. By March 2009, retirement savings had lost an estimated \$3.4 trillion, 40% of their value.<sup>177</sup> For those nearing retirement, these losses were irretrievable.

## 2. Monetary Theory, Bank Regulation,<sup>178</sup> and Ben's Promise

Milton Friedman's ninetieth birthday celebration, on Friday November 8, 2002, was a grand intellectual occasion for the orthodox branch of the economics profession. The University of Chicago invited a distinguished group of economists, including Nobel Laureate James Heckman and Federal Reserve Board member Benjamin Bernanke. The fete and conference were held at the architecturally important Max Palevsky Cinema, with elegant red velvet seating on two levels for 375 attendees, in Ida Noyes Hall on the East 59th Street side of campus.

Ben Bernanke's speech at 3 p.m. that day was a highly anticipated end-of-the-birthday celebration and conference that welcomed Nobel Prize winner Friedman for a "rare return to campus" from his home in California. The

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<sup>176</sup> Mark Pittman & Bob Ivory, *Financial Rescue Nears GDP as Pledges Top \$12.8 Trillion*, BLOOMBERG, Mar. 31, 2009.

<sup>177</sup> Atkinson, Luttrell & Rosenblum, *supra* note 18.

<sup>178</sup> See Donna Borak, *Will The Fed's Capital Rules Interfere with Monetary Policy?*, AMERICAN BANKER (Apr. 17, 2014), <https://www.americanbanker.com/news/will-the-feds-capital-rules-interfere-with-monetary-policy>, for a discussion of how the overlap and potential conflicts between monetary and bank regulation policy has only recently come to attention as reported in the financial press.

The Fed's banking rule writers in years past paid little, if any, attention to the potential fallout of their efforts on monetary policy or the broader economy, perhaps making a small mention of how a regulatory change could result in fewer loans. But nowadays Fed officials are repeatedly drawing links between financial stability and monetary policy, including which is better at spotting or reducing asset-price bubbles. Fed Chairman Ben Bernanke set that line of thinking in motion, and new Chair Janet Yellen has made balancing monetary policy and bank supervision the central bank's No. 3 priority behind the two disciplines themselves. "Nobody talked about the link between financial stability and monetary policy," Petrou said. "Academics didn't see it, and the Fed didn't understand it, and so nobody thought about it. We learned the hard way how intertwined financial stability and monetary policy can be.

*Id.*



excitement that afternoon centered on the fact that Bernanke's 1983 American Economics Review article, "The Non-monetary Effects of the Financial Crisis in the Propagation of the Great Depression,"<sup>179</sup> was an important revision that built on Friedman and Schwartz' monetary theory of the causes of the Depression.<sup>180</sup> As a member of the Board of Governors of the Federal Reserve, Bernanke had both ideas and the power to implement his ideas. Bernanke's scholarly, well-researched speech that afternoon catalogued Friedman's contributions to macroeconomic thinking.<sup>181</sup>

The speech is most remembered, however, for Bernanke's closing, a promise to Friedman and his longtime collaborator, Anna Schwartz: "I would like to say to Milton and Anna: regarding the Great Depression. You're right, we did it. We're very sorry. But thanks to you, we won't do it again."<sup>182</sup>

By all accounts, Bernanke strove gallantly to keep that promise as the Chair and intellectual leader of the Board during the crisis. Bernanke's reference to "we did it" in the now famous "promise" refers to two schools of thought within the Hoover Administration after the stock market crash and the subsequent dramatic loss of productivity and banking stability. The passive liquidationists, led by Secretary of the Treasury, Andrew Mellon, and the Fed, argued that the government should not intervene in a banking panic because the disruption and purging of the economy, no matter how painful to innocent citizens, were necessary to restore the balance within the capitalist economic system. Hoover's memoirs assign this infamous phrase to Mellon: "Liquidate labor, liquidate stocks, liquidate the farmers, and liquidate real estate."<sup>183</sup>

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<sup>179</sup> See generally Ben S. Bernanke, *The Non-monetary Effects of the Financial Crisis in the Propagation of the Great Depression*, 73 AM. ECON. REV. 257 (1983).

<sup>180</sup> Bernanke was careful to make clear in the birthday speech that his own work on the Depression did not reject Friedman and Schwartz' basic monetary thesis that "the contraction is in fact a tragic testimonial to the importance of monetary forces." As I have always tried to make clear, my argument for nonmonetary influences of bank failures is simply an embellishment of the Friedman-Schwartz story; it in no way contradicts the basic logic of their analysis. Ben S. Bernanke, Governor of the Bd. of Directors, Fed. Reserve Sys., Speech on Milton Friedman's Ninetieth Birthday, Remarks at the Conference to Honor Milton Friedman (Nov. 8, 2002).

<sup>181</sup> *Id.*

<sup>182</sup> *Id.*

<sup>183</sup> HERBERT HOOVER, THE MEMOIRS OF HERBERT HOOVER: THE GREAT DEPRESSION 1929-1941 30 (1953). Note that Hoover's attribution of Mellon's hardline liquidationist quote has recently been challenged by banking scholar Larry White, who counts Hoover's memoirs as revisionist history, designed to polish Hoover's irreparably damaged presidential legacy by assigning the most heartless version of the now widely discredited liquidationist theory of monetary policy to his Secretary of the Treasury, Andrew Mellon. Lawrence H. White, *Did Hayek and Robbins Deepen the Great Depression?*, 40 J. MONEY, CREDIT & BANKING 751, 758-59 (2008).

For liquidationists, panics and recessions were a good way to purge the excess credit spilling out after an imprudent credit binge, like the stock market speculation that preceded the Crash of 1929. President Hoover aligns himself with the second school of the opposing forces that lost the liquidationist battle at the Fed. Hoover argued that he favored “cushioning” the impacts of the collapse by government action, such as creating the Reconstruction Finance Corporation, designed to save the railroads, and to provide liquidity to banks to cushion the disruption of depositor panics. Hoover said that he favored protecting unemployed workers, farmers and other small businesses from bankruptcies.<sup>184</sup>

The “liquidationist theory” carried the day, and in 1928 the Fed decided to begin a series of interest rate increases. Liquidationists believed that after a credit-fueled bubble the central bank should mop up the excess credit in the economy by raising interest rates. Today this approach is widely mocked as a foolish policy choice that damaged the US economy, leading to 25% unemployment, the collapse of the U.S. banking system and a prolonged disruption of the economic security of the nation.<sup>185</sup>

Instead of the liquidationist theory that captivated the Depression Fed and Mellon,<sup>186</sup> the Greenspan-Bernanke Fed was committed to the largely discredited ideas of radical financial deregulation, self-correcting markets, and moral hazard as a basis for intervention in systemic panics. In the Friedman birthday speech, Ben Bernanke lamented the series of Fed decisions from 1928 to 1932 to contract the money supply. Under this approach, the Fed raised interest rates and failed to supply emergency lending to banks suffering depositor runs. They thus missed the chance to restore confidence in the safety of deposits in the system of the time, before deposit insurance.

Indeed, a central element of the Federal Reserve’s original mission had been to provide just this type of assistance (lender of last resort lending to stem depositor runs) to the banking system. The Fed’s failure to fulfill its mission

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<sup>184</sup> HOOVER, *supra* note 183, at 31.

<sup>185</sup> *Id.* Bernanke, provides this account of the impact of the Depression on views of government:

The impact that the experience of the Depression has had on views about the role of the government in the economy is easily understood when we recall the sheer magnitude of that economic downturn. During the major contraction phase of the Depression, between 1929 and 1933, real output in the United States fell nearly 30 percent. During the same period, according to retrospective studies, the unemployment rate rose from about 3 percent to nearly 25 percent, and many of those lucky enough to have a job were able to work only part-time.

*Id.*

<sup>186</sup> Andrew Mellon, Hoover’s Secretary of the Treasury, is widely quoted as the source of a heartless version of liquidationist theory. White, *supra* note 183, at 758–59.

was, again, largely the result of the economic theories held by the Federal Reserve leadership. The infamous “liquidationist” thesis of Treasury Secretary Andrew Mellon, who argued that weeding out “weak” banks was a harsh but necessary prerequisite to the recovery of the banking system.<sup>187</sup>

### 3. The Harms of Narrow Academic and Professional Cultures in Macroeconomics

The sad irony of the brilliance of Ben Bernanke is that, just like the Depression-era Fed that became unwisely attached to the bad idea(s) known as the “liquidationist” theory of monetary policy, Bernanke and the Fed of his era became attached to their own set of bad ideas. In the 2008 financial crisis, the bad ideas that Bernanke-Greenspan embraced were the laissez faire belief in self-correcting markets leading to radical financial deregulation. This approach then cascaded to create a regulation-free zone consisting of an opaque shadow banking system devoid of capital cushions. Such an environment created balance sheet fusion with the formal banks, lack of regulatory oversight and finally blind reliance on macroeconomic tools (interest rates up or down to get out of a recession) just as the second greatest global financial and economic crisis came to a head.

As I discuss more fully below, the interconnected nodes—created by Fed bank regulatory action and inaction before the crisis—converged between 2004 and 2008 to create a financial disaster that was beyond the cognitive perception of a collection of the best and the brightest macroeconomists leading the Federal Reserve. The crisis exposed a cognitive narrowness that reflects continuity from pre-crisis belief in self-correcting markets for home loans (without government rules to prevent exploitation of vulnerable populations) to the post-crisis effort to adhere, incompletely, to a diffuse concept of moral hazard precepts for public policy choices in a global credit crisis. Both liquidationist theory and laissez faire belief in self-correcting markets, historically plagued with racial exploitation, were economic phrenology. They were pseudo-scientific understandings of how the world works, even as it was changing dramatically.

The 2008 financial crisis was the result of a profound economic miscalculation by the Federal Reserve. The transcripts<sup>188</sup> of the Federal Reserve meetings

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<sup>187</sup> Ben S. Bernanke, Governor, Bd. of Governors, Fed. Reserve Sys., *Money, Gold, and the Great Depression*. Remarks at the H. Parker Willis Lecture in Economic Policy, (May 2, 2004) [hereinafter *Money, Gold, and the Great Depression*].

<sup>188</sup> TRANSCRIPTS OF FEDERAL OPEN MARKET COMMITTEE MEETINGS 2007-2009, *available at* <https://www.federalreserve.gov/monetarypolicy/fomchistorical2007.htm>, <https://www.federalreserve.gov/monetarypolicy/fomchistorical2009.htm>.

from the most intense period of the financial crisis, 2007-2009, provide, for the first time, a comprehensive factual basis for evaluating the dynamics of these highly confidential deliberations. This Article offers a novel framework of “cognitive narrowness”<sup>189</sup> to answer two crucial questions about the Fed’s failure to see the residential mortgage train headed straight for the global economy. First, why didn’t they see the crisis approaching? Second, why didn’t they have contingency plans in place for the doomsday scenario that all major federal agencies are required to have in their areas of responsibility?

What factors within the Board’s decision-making process obscured its view of the potential for panic in the unregulated shadow banking system, and caused its attention to be drawn instead to the wrong problem, inflation? This misdirection meant that this global central bank was forced to resort to ad hoc solutions. Fortunately, they mostly worked. But, we are still left with the lingering question of why the Fed’s pre-crisis planning failed to generate a previously agreed upon plan of action for the real crisis: a panic in the unregulated shadow banking market, consisting of hedge funds, pension funds and complex structured financial instruments to provide short term funding for residential mortgage securitizations. The crisis that emerged in 2008 was within the Fed’s responsibility as a financial regulator. However, bank regulation was an orphan among the Fed’s many economic leadership roles.

This section combines four different, but related, features. These four dynamics fit within my concept of “cognitive narrowness.” This framework provides a useful way of starting to figure out the reason for the most profound economic miscalculation since the Great Depression. The first of the four features is the Board’s ideological commitment to free markets in financial regulation; the second is the narrow band of professional training in macroeconomics within the Board of Governors constrained awareness of how the pre-crisis deregulation had unleashed unbridled risk that was hidden from view.

The third feature is that the composition of the board and rotating membership in the Fed Open Markets Committee lacked a diverse set of perceptual tools and experience.<sup>190</sup> Regarding this particular features, decisional

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[federalreserve.gov/monetarypolicy/fomchistorical2008.htm](http://federalreserve.gov/monetarypolicy/fomchistorical2008.htm), and <https://www.federalreserve.gov/monetarypolicy/fomchistorical2009.htm> (last visited Oct. 16 2016) [hereinafter FOMC TRANSCRIPTS]. Note that the charts, graphs, and other supporting documents were released on Friday, February 21, 2014.

<sup>189</sup> I have adopted the label “cognitive narrowness” to describe four separate, but related phenomena that are observable in the Federal Reserve policy actions before and after the Financial Crisis.

<sup>190</sup> After confirmation, upon assuming formal leadership of the Fed, Chair Yellen addressed the problem of insufficient diversity in the economics profession as a contributing factor in the failure of the profession to see the financial crisis. Yellen has proven to be a visionary leader

economist Scott Page was able to establish through models for difficult problems that a diversity of perspectives, heuristics, and personal experience trumped individual ability and homogeneity. The Page models showed that “a randomly selected collection of individual problem solvers outperforms a collection of the best individual problem solver.”<sup>191</sup>

Finally, fourth, the Fed displayed many of the characteristics of Groupthink, first catalogued by Yale social psychologist, Irving Janis, in his

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speaking to the economics profession about the conceptual problems afflicting the predictive power of macroeconomics. Nicholas Lemann, *The Hand on the Lever: How Janet Yellen is Redefining the Federal Reserve*, NEW YORKER (July 21, 2014), <http://www.newyorker.com/magazine/2014/07/21/the-hand-on-the-lever>.

Speaking to the American Economics Association, October 2014, Yellen observed:

There has been a fair amount of public debate in recent years about the health of the economics profession, prompted in part by the failure of many economists to comprehend the dire threats and foresee the damage of the financial crisis. When the public asks whether economists did all they could have to understand those threats, in part they are asking whether our profession did enough over the years to test ideas and assumptions that turned out in some cases to have been mistaken or misplaced. And part of that question is this one: Did the economics profession recruit and promote the individuals best able to bring the energy, the fresh insights, and the renewal that every field and every body of knowledge needs to remain healthy?

Janet L. Yellen, Chair, Bd. of Governors, Fed. Reserve Sys., Welcoming Remarks at the National Summit on Diversity in the Economics Profession, (Oct. 30, 2014), <https://www.federalreserve.gov/newsevents/speech/yellen20141030a.htm>.

For Yellen’s comments on network theory, see Janet L. Yellen, Vice Chair, Bd. of Governors, Fed. Reserve Sys., Interconnectedness and Systemic Risk: Lessons from the Financial Crisis and Policy Implications, Remarks at the American Economic Association/American Finance Association Joint Luncheon (Jan. 4, 2013), <http://www.federalreserve.gov/newsevents/speech/yellen20130104a.htm> [hereinafter *Interconnectedness and Systemic Risk*].

For Yellen’s comments on unemployment, see Janet L. Yellen, Chair, Bd. of Governors, Fed. Reserve Sys., Labor Market Dynamics and Monetary Policy, Remarks at the Federal Reserve Bank of Kansas City Economic Symposium (Aug. 22, 2014), <http://www.federalreserve.gov/newsevents/speech/yellen20140822a.htm>.

For Yellen’s comments on subprime mortgages, see Janet L. Yellen, Chair, Bd. of Governors, Fed. Reserve Sys., Housing Market Developments and Their Effects on Low-and Moderate-Income Neighborhoods, Remarks at the 2011 Federal Reserve Bank of Cleveland Policy Summit (June 9, 2011), <http://www.federalreserve.gov/newsevents/speech/yellen20110609a.htm>.

<sup>191</sup> SCOTT PAGE, THE DIFFERENCE: HOW THE POWER OF DIVERSITY CREATES BETTER GROUPS, FIRMS, SCHOOLS, AND SOCIETIES 162–74 (2008).

classic study of failures in high level government decision-making groups.<sup>192</sup> Janis study identifies the how the dynamic of closed-minded “groupthink” led to several major “government fiascos.” Irving explores how the flawed, narrow cognitive style of small high level groups of government decision-makers led to the major “fiascos” of bad decision-making before Pearl Harbor: the Cuban Missile Crisis, the Bay of Pigs invasion, and the separation of North and South Korea. Finally, Janis concludes that the Watergate cover-up was a classic fiasco, in which a small group of high level government decision-makers failed to seek the advice of a broader group of thinkers before they plunged headlong into a paranoid “fiasco” that led to President Nixon’s resignation, in the face of certain impeachment.

These four attributes of cognitive narrowness combined to produce a treacherous perceptual blindness. If you don’t see the individual components of the crisis as problems, then it is hard to prepare for coherent solutions. The growing subprime lending and reliance on financing from complex, unregulated financial products were never seen as problems by the Greenspan-led Fed. Chairman Bernanke shared these free market pre-commitments. Once the crisis emerged however, Bernanke quickly abandoned his reluctance to use government power to shape a rescue.

The discipline of macroeconomics itself narrowed the vision of Fed leadership. Seventh Circuit Judge Richard Posner, the father of law and economics, blamed macroeconomics for the failure of the Fed to predict the crisis.<sup>193</sup>

Macroeconomics and financial economics are highly prestigious fields of economics, and the leading macroeconomists and finance theorists are brilliant people. Yet although the housing bubble started to leak air in 2005 and burst in 2006 and the economy was in recession from the end of 2007 at the latest and the drumbeat of signals warning of an impending crash became deafening by the spring of 2008, not enough economists, whether in academia, the government, or business, sounded the alarm in time to have a significant impact on the government or the banking industry. Securitization of mortgages and other debts was taken at face value as protecting us against the kind of housing-credit bubbles that had ravished East Asian countries in the 1990s. In May 2006, Federal Reserve chairman Bernanke

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<sup>192</sup> See generally IRVING L. JANIS, *GROUPTHINK: PSYCHOLOGICAL STUDIES OF POLICY DECISIONS & FIASCOES* (1972).

<sup>193</sup> RICHARD A. POSNER, *A FAILURE OF CAPITALISM: THE CRISIS OF '08 AND THE DESCENT INTO DEPRESSION* 190 (2011) [hereinafter *A FAILURE OF CAPITALISM*].

said that the housing market was “cooling,” but that this cooling was “orderly and moderate” and that the market appeared to be “headed for a safe landing.” His predecessor, Alan Greenspan, who in July 2005 had expressed mild concern about housing prices, said in October 2006 that the “worst may well be over.”<sup>194</sup>

One preeminent macroeconomist was caught without an economic compass when he refused to say that a recession was underway, yet a mere 30 days later stated that the evidence that the nation was in a recession was conclusive.<sup>195</sup> Posner offers this more general critique of macroeconomics:

Even now, the profession seems adrift in uncertainty and irresolution, as if it cannot believe what had happened. No consensus has emerged with regard to how best to respond to the depression. Most economists seem willing to try virtually anything in an effort to dig the economy out of the hole into which it’s fallen.<sup>196</sup>

Shared faith in macroeconomics is the necessary starting point for evaluating the two interconnected roles of the Fed as banking regulator and its role as guarantor of our national economic stability and freedom from the damaging shocks of banking panics. As financial regulator, the Fed is the lead government conceptualist with responsibility for articulating coherent rationale for government regulation of our system of private financial institutions. It is, of course, also responsible for implementing a system of rules, at once practical and logical. These must be rules that succeed in monitoring and controlling the risk-taking propensities of private financial institutions. Theory and reality must align.

My review of the Fed Transcripts, minutes, and other materials from the FOMC crisis deliberations supports my agreement with U.C. Berkeley sociologists Neil Fligstein, Jonah Stuart Brundage and Michael Schultz (hereinafter Fligstein et al.) who argue that:

[The Federal Open Market Committee] failed to see the depth of the problem because of its overreliance on macroeconomics as a framework for making sense of the economy. As a result of this framework, Committee members failed to see the deeper

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<sup>194</sup> *Id.* at 253.

<sup>195</sup> *Id.* at 255.

<sup>196</sup> *Id.*

connections between the housing market and the financial sector via the securitization of mortgages and the use of financial instruments. Thus, they significantly underestimated the degree to which the economy was in danger of collapse.<sup>197</sup>

Fligstein and his colleagues consider the role of macroeconomic commitments as the major source of the limited vision revealed in the 2007-9 transcripts. Fligstein, a sociologist, studies the sociology of markets, with special focus on financial markets.<sup>198</sup> Fligstein, et al. ask why the Fed was so sanguine about the prospects of a limited impact of the contraction in the housing market, despite substantial concerns about the problems developing in financial markets.

Primarily, they rely on the theory of “sensemaking” in sociology. Using “topic models”<sup>199</sup> to map the recurring word patterns in the transcripts of the pre-crisis deliberations of the Federal Open Market Committee (FOMC), Fligstein’s review of meeting transcripts revealed that:

[The FOMC] had surprisingly little recognition that there was a serious financial crisis brewing as late as December 2007. This lack of awareness was a function of the inability of the FOMC to connect the unfolding events into a narrative reflecting the links between the housing market, the subprime mortgage market, and the financial instruments being used to package the mortgages into securities. We use the idea of sensemaking to explain how this happened. The Fed’s main analytic framework for making sense of the economy, macroeconomic theory, made it difficult for them to connect the disparate events that comprised the financial crisis into a coherent whole.

We use topic modeling to analyze transcripts of FOMC meetings held between 2000 and 2007, demonstrating that the framework provided by macroeconomics dominated FOMC conversations throughout this period. The topic models also show that each of the issues involved in the crisis remained

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<sup>197</sup> Neil Fligstein et al., *Why the Federal Reserve Failed to See the Financial Crisis of 2008: The Role of ‘Macroeconomics’ as a Sensemaking and Cultural Frame* 3-4 (Inst. for Research on Labor & Employment, Working Paper No. 111-14, 2014).

<sup>198</sup> *Biography of Neil Fligstein*, UC BERKELEY SOC. DEP’T, <http://sociology.berkeley.edu/faculty/neil-fligstein>.

<sup>199</sup> Fligstein and his colleagues define topic models as “a class of statistical methods that attempt to describe underlying semantic regularities in a set of documents by mapping recurring relationships between words.” Fligstein et al., *supra* note 197, at 14.



a separate discussion and were never connected together. This Article adds to the persuasive Fligstein “sensemaking” explanation by going beyond the limitations of the Fed deliberations identified in the sensemaking critique. I introduce an interdependent network explanation for why the dynamics of the separate elements of the crisis interacted with each other to produce the sudden catastrophic failure of the entire global financial system. My discussion of network theory in this Article draws most heavily from the physical network theories and metaphors of scientists and bankers.<sup>200</sup> I have also benefited greatly from the work of law professor David Grewal who maps another sphere of network theory in globalization. Grewal’s work combines social theory, political theory, philosophy, ethics and human freedom to craft an argument about the dynamic of the globalization of power.<sup>201</sup> The future application of network theory in constructing models of systemic financial risk will require a creative interdisciplinary perspective that incorporates both the human dimension of Grewal and the physical science perspective of Gai.

This combination should yield valuable analyses of how interdependent global financial networks behave in order to improve financial regulatory prediction. My discussion of networks below is a hybrid of social interaction in financial networks (racial discrimination) and the physical balance sheet fusion of regulated systems of formal banks and unregulated shadow banks (shadow bank node). An understanding of both the social and physical properties of networks is required to avoid repeating the Fed’s profound economic failures to predict the global cascade of financial failure during the crisis.

### *B. The Fed’s Blindness to the Emerging Literature of Interdependent Financial Networks*

#### *1. Network Theory for Bankers<sup>202</sup>*

Banks and other financial intermediaries have a long tradition of sharing risk and excess capital through direct interbank lending and loan syndications. The traditional forms of connection and sharing of assets and

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<sup>200</sup> U.S. National Academies/National Research Council and the Federal Reserve Bank of New York collaborated to “stimulate fresh thinking on systemic risk” they invited a variety of researchers from different disciplines to explore the conceptual congruence between systemic risk in the financial sector and engineering, ecology, epidemiology, of science. John Kahmbhu, Scott Weidman & Neel Krishnan, Preface to *New Directions for Understanding Systemic Risk*, 13 ECON. POL’Y REV. i, i (2006).

<sup>201</sup> See generally DAVID GREWAL, NETWORK POWER AND THE SOCIAL DYNAMICS OF GLOBALIZATION (2008).

<sup>202</sup> See generally Robert M. May, Simon A. Levin & George Sugihara, *Ecology for Bankers*, 451 NATURE 893 (2008).

liabilities across broad categories of financial intermediaries were largely benign. However, the financial crisis revealed new, more sinister implications of a relatively recent phenomenon: the global interconnections between regulated, fully capitalized formal commercial banks and the largely unregulated shadow banks without capital cushions to protect against adverse events, panics, and runs.

Five years after the crisis, Fed Chair Janet Yellen gave an important presentation to the American Economics Association assessing the systemic risk concerns that arose during the crisis. Yellen noted that these concerns, along with much recent academic research, suggest:

That interconnection among financial intermediaries is not an unalloyed good. Complex interactions among market actors may serve to amplify existing market frictions, information asymmetries, or other externalities. The difficult task before market participants, policymakers, and regulators with systemic risk responsibilities such as the Federal Reserve is to find ways to preserve the benefits of interconnectedness in financial markets while managing the potentially harmful side effects.<sup>203</sup>

In the wake of the Great Recession there has been increasing attention within the scholarly literature to the search for explanatory models addressing the relationship between systemic risk and interconnectedness.<sup>204</sup> In her talk, Yellen described five models that illustrate the complexity and density of linkages between institutions.<sup>205</sup> While recognizing the advantages of

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<sup>203</sup> Once she became Chair, Yellen demonstrated the intellectual curiosity and leadership one might expect from an academic economist. Her speeches to the American Economic Association after her confirmation set a new research agenda for the entire macroeconomics profession. *Interconnectedness and Systemic Risk*, *supra* note 190.

<sup>204</sup> Yellen mentions more than 600 publications since 2007. *Id.* at 5.

<sup>205</sup> Five models are discussed by Yellen: 1) Allen and Gale model that sustains that systemic risk arises through liquidity shocks and has a domino effect in the system. Systems that have diversified funding (complete networks) are more resilient to shocks than system where funding is not diversified (incomplete networks); 2) Douglas Diamond and Phillip Dybvig model, that shows how stress or uncertainty can cause coordination failures in check-clearing systems where credit extensions among banks results in institutions “too interconnected to fail”; 3) Hyun Song Shin model that explains the complexity of the links between financial institutions where interbank claims, that grow and contract far more quickly than economic fundamentals, affect the leverage of the institutions involved. During a boom institutions tend to increase leverage by borrowing and lending more intensively to each other causing the “intertwining claims to extend further and further”; during shocks institutions look for deleverage in the short term by withdrawing credit from each other consequently affecting the

interconnectedness in the financial system, such as risk sharing and diversification, she also warned of the potential systemic risks these connections pose.<sup>206</sup>

As I have said, I believe that the study of networks as developed several areas of science offers a template for research into financial networks. In their article “Ecology for Bankers,” Robert May,<sup>207</sup> Simon Levin, and George Sugihara explore the similarities between ecosystems and financial systems. Both are complex, dynamic, interlinked systems whose stability is threatened by conditions that are not always easy to identify except from the perspective of the system as a whole—the perspective, I argue, that must be adopted by regulators like the Fed.

## 2. The Shadow Bank Node

“[T]he nation’s financial system had become vulnerable and interconnected in ways that were not understood by either the captains of finance or the system’s public stewards.”<sup>208</sup>

- *Financial Crisis Inquiry Commission*

Sheila Bair, Chair of the FDIC during the crisis, noted the potentially cataclysmic consequences of the emerging shadow bank connections to the large regular banks.<sup>209</sup> Bair declared the danger lurking in the shadow banking

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liability side of other institution’s balance sheet and ultimately forcing them to liquidate assets at fire prices; 4) Ricardo Caballero and Alp Simsek model illustrates that a lack of information of the participant’s counterparties can create systemic risk in financial networks. The “maximum principle” is that “each seeks to maximize profits under the assumption that the network is configured in the worst possible manner from its own perspective,” therefore an adverse liquidity shock would lead to withdrawn funding from their counterparties, magnifying the effects of the initial shock; 5) Gai, Haldane and Kapadia model focus on the range of activities and different size and position of the market participants—some banks are larger than others, more interconnected than others and some of them are weaker than others. Failure in this concentrated network will cause a more serious contagion, thus, understanding these relationships helps prevent systemic risk. *Id.* at 5–10.

<sup>206</sup> “Diversification reduces risk and improves stability. While the idea is compelling, both economic research and the events of the financial crisis suggest that it is incomplete.” *Id.* at 6.

<sup>207</sup> May, *supra* note 202.

<sup>208</sup> FINANCIAL CRISIS INQUIRY REPORT, *supra* note 9, at 6. One financial industry witness before the FCIC said: “All this financial creativity was like ‘cheap sangria’, a lot of cheap ingredients packaged to sell at a premium, it might taste good for a while, but then you get headaches later.” Transcript of First Public Hearing of the Fin. Crisis Inquiry Commission, Day 1, Panel 2, Financial Market Participants 14 (Jan. 13, 2010) (statement of Michael Mayo).

<sup>209</sup> See generally SHEILA BAIR, BULL BY THE HORNS: FIGHTING TO SAVE MAIN STREET FROM WALL STREET AND WALL STREET FROM ITSELF (2012).

node. Bair gives this harrowing account of the unregulated shadow banks that held pools of home mortgages in structured investment vehicle (SIVs) that were established as trusts. They were hidden from the FDIC right up to the moment when the shadow banking node began to fail in August 2007. The August 2007 failure followed the model of other interdependent network failures.<sup>210</sup> Soon there was a cascade of failures running through other nodes, unseen by the Federal Reserve, that ended with the Lehman failure in September 2008. Bair provides this detailed account from inside the front lines of the global financial crisis:

My first clue was the structured investment vehicle (SIV) fiasco, which occurred in August 2007. That was when the canary in the coalmine started gasping for breath. A number of large financial institutions, led by Citigroup, started having trouble accessing enough funding to support their mortgages and MBS investments. Citi and a few other large banks had set up something called “structured investment vehicles” as a way to invest in mortgages and mortgage-backed securities. For reasons that still today [2013] remain a mystery to me, they were allowed by their regulators—the Fed and the OCC—to keep the investments off balance sheet, meaning that they were not included in the financial reports insured banks filed with us, and most important, they were not required to hold capital or reserves against those assets to absorb losses. Indeed, our examiners did not know anything about SIVs until the Federal Reserve Board alerted us to Citi’s difficulties.<sup>211</sup>

One of the most notable transformations in the financial system in the last twenty years was the growth of shadow banking.<sup>212</sup> Before the Great Recession, the shadow banking system was believed to be no more than a competitor of traditional commercial banking. For example, in the 1970s investment banks like Merrill Lynch, Fidelity and Vanguard lured deposit customers away from

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<sup>210</sup> See UNDERSTANDING FINANCIAL INTERCONNECTEDNESS, *supra* note 72, for the most powerful explanation of the dynamic of cascading failure caused by interconnected bank balance sheets. In addition, I identify the characteristics of the five leading models identified by Chairwoman Yellen’s important speech analyzing the characteristics of financial system interdependent network failure. *Interconnectedness and Systemic Risk*, *supra* note 190.

<sup>211</sup> BAIR, *supra* note 209, at 73.

<sup>212</sup> Izabella Kaminski, *The Terminal Disease Afflicting Banking*, FINANCIAL TIMES ALPHAVILLE BLOG (July 18, 2012), <http://ftalphaville.ft.com/2012/07/18/1085541/the-terminal-disease-afflicting-banking/>. See *supra* note 16 for more information on “shadow banking.”

traditional banks by offering high interest rates on transaction accounts that functioned exactly like checking accounts, with one important exception: the new “cash management accounts” were not covered by deposit insurance.<sup>213</sup>

At the time, the Fed believed that in the event of problems, the well-run, well-capitalized, and well-regulated large commercial banks could provide vital support for the entire economy, thus rendering the shadow sector unimportant as a source of risk to the overall economy.<sup>214</sup> This minimizing approach to the shadow sector (consisting of commercial paper, asset-backed commercial paper, repo, and money market mutual funds) became untenable as the value of the shadow banking sector surpassed the value of the formal banking sector by 2006.<sup>215</sup> In addition to the growing value of the shadow sector, the pervasive links between the two systems would later render the traditional banking system so deeply obligated for off-balance-sheet activities transferred to the shadow sector that the formal sector would become impotent to provide adequate liquidity without extraordinary emergency support from the Fed. Thus, the cascading effects of the runs on Bear Stearns and Lehman Brothers precipitated a general panic and eventually the crash.

The Federal Reserve was startled to discover during the financial crisis that the formal banking system and the shadow banking system had become inseparable. Selected failures within the shadow system had sparked a panic because of the system’s lack of transparency, and this opacity in turn triggered a rolling sequence of panic in both other shadow participants and the deeply interconnected conventional commercial banks, which were then called on to back up their shadow partners. Unfortunately, the commercial banking sector lacked sufficient total liquidity to stabilize both systems. This illiquidity, in turn, threatened the failure of the entire global financial system.<sup>216</sup>

Macroeconomist Gary Gorton describes this new form of panic in the shadow banking sector as follows:

Economists view the world as being the outcome of the “invisible hand,” that is, a world where private decisions are unknowingly guided by prices to allocate resources efficiently.

The credit crisis raises the question of how it is that we could get slapped in the face by the invisible hand. What happened? Many private decisions were made, over a long time, which

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<sup>213</sup> FINANCIAL CRISIS INQUIRY REPORT, *supra* note 9, at 29.

<sup>214</sup> *Id.* at 28.

<sup>215</sup> *Id.* at 32, Figure 2.1.

<sup>216</sup> See generally ZOLTAN POZSAR ET AL., FED. RESERVE BANK OF N.Y., SHADOW BANKING (2012).

created the shadow banking system. That system was vulnerable to a banking panic. The U.S. had a banking panic starting in August 2007, one that continues today. But banking panics, you say, like the one in the movie “It’s a Wonderful Life,” don’t happen anymore.

Indeed, until these recent events, most people did not think of banking panics as something to be concerned about. After all, the panics of the Great Depression are a dim memory. Since 1934 when deposit insurance was adopted, until the current panic—a span of almost 75 years—there had been no banking panics.<sup>217</sup>

A review of regulatory decisions since as early as 1995 and more intensively during the early 2000s makes it clear that US regulators were blind to the elephant in the room—the deep and complex interconnections that had emerged between the shadow banks and the commercial banking system. As late as September 2008, after the failure of Lehman Brothers, the Fed did not recognize that the interdependent networks of racialized subprime lending, securitization, structured products, off-balance-sheet accounting, and the embedded risks of unregulated short-term funding markets were inseparably linked to the heavily regulated commercial banking system and the investment banks. The deadly synergy of free-market ideology and GroupThink homogeneity made the Fed Board of Governors ideally suited to overlook the factors triggering a deadly cascade of failures that overwhelmed the Board and required it to do “whatever it takes” to avoid a global financial calamity.

### 3. The Race Node

The post-crisis literature has failed to engage racial discrimination as a source of systemic risk.<sup>218</sup> Fed Governor Sarah Bloom Raskin’s remarkable leadership has begun a conversation about the role of racially discriminatory lending in the financial crisis.<sup>219</sup> This Article is intended to extend that important

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<sup>217</sup> See generally Gary Gorton, *Slapped in the Face by the Invisible Hand: Banking and the Panic of 2007* (Yale & NBER, Working Paper, 2009).

<sup>218</sup> There is a robust literature discussing racial discrimination in home mortgage origination, however, none to date takes up the systemic role that racial discrimination played in the Crisis.

<sup>219</sup> See, e.g., Sarah Bloom Raskin, Member, Bd. of Governors of the Fed. Reserve Sys., “Aspects of Inequality in the Recent Business Cycle” at “Building a Financial Structure for a More Stable and Equitable Economy” the 22nd Annual Hyman P. Minsky Conference on

conversation. It is crucial to elevate the consideration of the persistent problem of racial discrimination in economically important markets such as housing. The Federal Reserve is the most robust econometric organization in the world, yet, as noted earlier, there is not a single reference to race or racial discrimination to be found in 1,800 pages of Board transcripts and speeches from 2007 to 2008.<sup>220</sup>

In my view, this cognitive omission of racial discrimination from the framework of factors that matter in setting capital levels, leverage ratios, and enforcement policies for both the formal and shadow systems will be a continuing vulnerability of the global banking system as long as the interconnectedness among a large variety of regulated and unregulated entities remains unrecognized. Race and economic inequality factors belong on any map of interdependent financial networks.

As I discuss more fully below, the network theory approach to systemic risk is promising because it proceeds on the assumption that as in electrical and other physically interdependent systems, a failure in a small node of an interdependent financial network can trigger a cascade of failure in the entire system.

This Article does not attempt to provide an economic data-driven model of race and inequality as integrated components of systemic risk. My task here is to provide one approach to answering the difficult question of why the Fed failed to perceive the interlinkage among network nodes of systemic risk. Through the lens of interdependent financial network theory, I show that one of these nodes, racial discrimination in home mortgage origination, contributed to the cascade of failures leading to the crisis.

The Fed can't solve problems to which it is blind. My aim is to encourage the Fed to do what it does best, create quantitative measurements of economic inequality and racial discrimination to make visible what it did not see as a source of systemic risk during the mortgage debt bubble. If the way to the Fed's heart and mind is through quantitative language, then normative inequality scholarship such as mine must provide a bridge from the status quo to a new understanding that transcends the macroeconomic, data-driven culture of the Fed.

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the State of the U.S. and World Economies, (Apr. 18, 2013) (stating that minorities are one of the groups that bear the brunt of a downturn because they are more likely to experience flat or declining wages, reduced hours, and unemployment during a recession); *see also* GEORGE J. AKERLOF & ROBERT J. SHILLER, *ANIMAL SPIRITS: HOW HUMAN PSYCHOLOGY DRIVES THE ECONOMY, AND WHY IT MATTERS FOR GLOBAL CAPITALISM* (2009) (providing an examination of why poverty rates are consistently higher among minorities); Sarah Bloom Raskin, Member, Bd. of Governors of the Fed. Reserve, *Aspects of Inequality in the Recent Business Cycle* (Apr. 18, 2013).

<sup>220</sup> FOMC TRANSCRIPTS, *supra* note 188. This assertion is based on my personal Boolean search for the word "Race!" in Federal Reserve transcripts 2007-2008.

In order to “put the pieces of the puzzle together” and “imagine”<sup>221</sup> the coming collapse, the Fed would have had to observe and interpret signals from many disparate but interdependent networks, signals that taken together posed massive systemic risk. In what follows I discuss a problem that particularly highlights the interdependent network risks that surprised the Fed and are central to the story of the failures of 2008: racially discriminatory subprime loans.

### *C. Deregulation: Faith in the Power of Self-Correcting Markets*

The lack of disciplinary consensus within macroeconomics allowed ideology and political commitments to dominate economic arguments. Posner leveled this charge as well. “The divisions within the economics profession over fundamental issues of policy gave political preferences free rein to shape economic policy.”<sup>222</sup>

Where was the Fed in all this?<sup>223</sup> “In 2005, Alan Greenspan, then chairman of the Federal Reserve Bank, praised subprime mortgages as a positive innovation made possible by better risk assessment. . . . Only two years later, there was growing concern that failing subprime loans, which had shot up to nearly a quarter of the total mortgage market originations, were driving our economy into recession.”<sup>224</sup> Beyond macroeconomics, the hybrid ideology of law and economics allows us to consider the impact of relaxed legal rules. First, consider the non-enforcement of prohibitions against unfair lending practices in home mortgage origination.

For example, Bob Gnaizda, the general counsel and policy director of the Greenlining Institute, a California-based nonprofit housing group, told the Commission that he began meeting with Greenspan at least once a year starting in 1999, each time highlighting to him the growth of predatory lending practices and discussing with him the social and economic problems they were creating.<sup>225</sup>

The Financial Crisis Inquiry Commission (FCIC) concluded that the entire financial crisis could have been avoided with more vigilant regulatory oversight. The FCIC singles out the Fed for this especially withering criticism.

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<sup>221</sup> Bernanke, *supra* note 171, at 82.

<sup>222</sup> A FAILURE OF CAPITALISM, *supra* note 193, at 273.

<sup>223</sup> Binyamin Appelbaum, *Fed Held Back as Evidence Mounted on Subprime Loan Abuses*, WASH. POST, Sept. 27, 2009, <http://www.washingtonpost.com/wp-dyn/content/article/2009/09/26/AR2009092602706.html?sid=ST2009122002648>.

<sup>224</sup> SONIA GARRISON ET AL., CTR. FOR RESPONSIBLE LENDING, CONTINUED DECAY AND SHAKY REPAIRS: THE STATE OF SUBPRIME LOANS TODAY 2 (2009).

<sup>225</sup> FINANCIAL CRISIS INQUIRY REPORT, *supra* note 9, at 9.



Little meaningful action was taken to quell the threats in a timely manner. The prime example is the Federal Reserve's pivotal failure to stem the flow of toxic mortgages. The Federal Reserve was the one entity empowered to so and it did not.<sup>226</sup>

Fidelity to the tenets of law and economics was perhaps the single-deadliest feature of myopia during the crisis. The reinforcing legal component of law and economics with its strong preference for private markets over legal rules led to the Board's first big failures: failure to intervene as the market proliferated racially exploitative loans<sup>227</sup> and failure to prevent the subsequent cascade of failures.

Macroeconomics has virtually nothing to say about racial discrimination.<sup>228</sup> It was the overriding belief in self-correcting markets that led Greenspan<sup>229</sup> and other board members to simply dismiss "as anecdotal"<sup>230</sup> the mounting evidence of pervasive racial discrimination in unregulated originations flooding minority communities. The legal arguments of Richard Posner, derived from Coase, had prevailed in government policy circles in the 1970s through the economic collapse in 2008.

Posner, of course, is the father of law and economics. His seminal casebook, *ECONOMIC ANALYSIS OF LAW*, bridged the disciplinary divide between economics and law. Posner tells us that the conception of economics he adopted for this casebook was that "economics is the science of rational choice."<sup>231</sup> In 1992, Posner accepted this challenge for testing the value of his contributions to what he called "positive" economic theory: An important test of a theory is its ability to explain reality. If it does a lousy job, the reason may be that its assumptions are insufficiently realistic.<sup>232</sup>

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<sup>226</sup> *Id.* at xvii

<sup>227</sup> *Id.* at xviii.

<sup>228</sup> But see GEORGE J. AKERLOF & ROBERT J. SHILLER, *ANIMAL SPIRITS: HOW HUMAN PSYCHOLOGY DRIVES THE ECONOMY, AND WHY IT MATTERS FOR GLOBAL CAPITALISM* (2009) for a welcome exception to my claim that macroeconomics is silent on racial discrimination.

<sup>229</sup> Greenspan to his credit did admit, with qualifications, this flaw in his thinking when questioned by Congressman Waxman.

<sup>230</sup> Ruhi Maker, a Rochester, NY foreclosure lawyer, reported that she met with Fed Board members Bernanke, Bies and Ferguson in October 2004. During that meeting Maker told the Board members that she had identified Bear Stearns and Lehman Brothers as the financial firms that "were producing such bad loans that the very survival of the firm was put in question." "We repeatedly see false appraisals and false income." Maker testified that "Fed officials seemed impervious to what the consumer advocates were saying." *FINANCIAL CRISIS INQUIRY REPORT*, *supra* note 9, at 15-16.

<sup>231</sup> RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 3 (5th ed. 1998).

<sup>232</sup> *Id.* at 19.

But, curiously, the transcripts when combined with the authoritative Financial Crisis Inquiry Commission autopsy reveal that Bernanke had an *incomplete commitment* to government rescues of failing financial firms. As, I discuss below, these transcripts provide for the first time persuasive evidence of the basis for the still incoherent distinction between the rescue of Bear Stearns-Lehman Brothers- AIG flip flops on the moral hazard of government bailouts. The transcripts show that the Fed wanted to send a signal that it would let *some*, but not all, firms fail. The internal discussion of Lehman Brothers in the summer and early fall of 2008 supports my “mixed signals,” “incomplete commitment” to free markets interpretation.

Paul Krugman, the progressive Nobel Laureate, and Richard Posner, the conservative founder of the law and economics movement—two public intellectuals who rarely agree on anything—separately criticize the Fed’s failure to predict this once in three generations financial crisis. Krugman’s diagnosis was delivered early and often, from his column in the *New York Times*. One early example, occurred in August 2007, one month before the full-blown crisis erupted. Krugman’s assessment of the Fed was blunt. He wrote about KKR Financial, an investment firm that was not regulated by the Fed or covered by deposit insurance, but provided funding for mortgage loans like depositors in the old-fashioned depository bank. When KKR announced that it couldn’t meet \$5 billion of its obligations. Krugman concluded that:

[I]n economic terms what’s been happening amounts to a burgeoning banking panic. . . . On Friday, the Federal Reserve tried to quell this panic by announcing a surprise cut in the discount rate, the rate at which it lends money to banks. Fed’s move is largely symbolic. It makes more funds available to depository institutions, a.k.a. old-fashioned banks—but old-fashioned banks aren’t where the crisis is centered. And the Fed doesn’t have any clear way to deal with bank runs on institutions that aren’t called banks.<sup>233</sup>

Posner’s evaluation, in particular, was quite harsh<sup>234</sup>:

Macroeconomics and financial economics are highly prestigious fields of economics, and the leading macroeconomists and finance theorists are brilliant people. Yet although the housing bubble started to leak air in 2005 and burst in 2006 and

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<sup>233</sup> Paul Krugman, *It’s a Miserable Life*, N.Y. TIMES, Aug. 20, 2007, at A19, <https://nyti.ms/2kASuLe>.

<sup>234</sup> A FAILURE OF CAPITALISM, *supra* note 193, at 253–54.

the economy was in recession from the end of 2007 at the latest and the drumbeat of signals warning of an impending crash became deafening by the spring of 2008, not enough economists, whether in academia, the government, or business, sounded the alarm in time to have a significant impact on the government or the banking industry. Securitization of mortgages and other debts was taken at face value as protecting us against the kind of housing-credit bubbles that had ravished East Asian countries in the 1990s. In May 2006, Federal Reserve chairman Bernanke said that the housing market was “cooling,” but that this cooling was “orderly and moderate” and that the market appeared to be “headed for a safe landing.” His predecessor, Alan Greenspan, who in July 2005 had expressed mild concern about housing prices, said in October 2006 that the “worst may well be over.” . . . But [these] statements by Greenspan and Bernanke . . . were misleading; they made things worse.<sup>235</sup>

Across ideological lines, a stable consensus has formed. The financial crisis was the result of a profound economic miscalculation. The Federal Reserve did not anticipate the financial crisis until it was too late.

Posner similarly penetrating critique of the Fed is perhaps even more problematic than Krugman’s because his work in the early 1970s adopting economics Nobel Laureate Gary Becker’s view of the market dynamics of racial discrimination provided the foundation for the deregulatory approach to racial discrimination in markets, an approach that certainly influenced Fed Chair Alan Greenspan’s thinking about whether to enforce the Home Ownership and Equity Protection Act (HOEPA) of 1994.

This section of the paper introduces a framework that tries to make sense of the Fed’s otherwise inexplicable miscalculation. I address two questions. First, why didn’t the Fed see the crisis coming, and second, when the crisis was just days away? Why did the Fed resort to ad hoc solutions without a well-developed plan of action?

The second question can be answered more easily than the first. In an emergency, the adrenaline flows and chaotic human reactions take over. In his last speech before he ended his term as Fed chair, Ben Bernanke expressed his own disorientation when the crisis erupted in September 2008. “If you’re in a car wreck or something, you’re mostly involved in trying to avoid going off the

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<sup>235</sup> *Id.* at 253–54.

bridge. And then, later on, you say, ‘Oh my God!’”<sup>236</sup> Bernanke’s car wreck metaphor certainly does capture the frenzied reaction to the crisis and the inconsistent initial response, but it doesn’t offer any insight as to *why* there was a crash.

Cognitive narrowness provides a useful way of answering both questions. I identify four, sometimes overlapping characteristics of cognitive narrowness: (1) an ideological commitment to free markets; (2) the narrow band of macroeconomic professional training and expertise within the Fed’s Board of Governors; (3) the problem of cognitive homogeneity as modeled by decisional economist Scott Page, who shows that a lack of diverse perspectives, diverse heuristics, and diverse cognitive tools combines to produce an unwitting perceptual blindness; and (4) the “Groupthink” syndrome, first identified by Yale social psychologist Irving Janis, who catalogued patterns of self-censorship and narrow consultation with outside experts in high-level government policy groups, patterns yielding a consensus that results in “fiascoes.”

If cognitive narrowness prevents you from seeing the components of a crisis as problems, then it is hard to envision solutions. The growth of subprime lending and the reliance on unregulated financial instruments were never seen as problems by the Greenspan-led Fed. Chairman Bernanke shared his predecessor’s free-market commitments, but once the crisis emerged, he quickly abandoned his reluctance to use government power to shape a rescue.

Curiously, the transcripts of closed meetings of the Federal Reserve Open Market Committee (FOMC) during the most intense phase of the global financial crisis in 2007 and 2008, along with the authoritative FCIC autopsy, reveal that Bernanke’s commitment to government rescue of failing financial firms was incomplete. As I discuss below, the new transcripts provide one persuasive explanation for the still incoherent decision to rescue Bear Stearns but not Lehman Brothers, just five months later, followed by the massive bailout for AIG. The Fed wanted to send a signal that it would let some but not all firms fail. The Fed was still in thrall to law and economics and the moral hazard critique of market-based incentives to curtail excessive risk-taking. The FOMC discussion of Lehman Brothers’ problems during the summer of 2008 after the Bear Stearns rescue supports this interpretation.

The FOMC transcripts contain no complete surprises, but they breathe life into the consequences of human failures of cognition and perception, and they provide confirmation of my argument that three crucial factors led to the Federal Reserve’s failure to anticipate the sudden near-collapse of the global financial system.

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<sup>236</sup> Martin Crutsinger, *Bernanke Likens ‘08 Financial Crisis to Car Crash*, SAN DIEGO TRIB, (Jan. 16, 2014), <http://www.sandiegouniontribune.com/sdut-bernanke-likens-08-financial-crisis-to-car-crash-2014jan16-story.html> (quoting Ben Bernanke during his final public appearance as chairman of the Federal Reserve)

First, adherence to incomplete or erroneous macroeconomic and ideological frameworks about how financial markets work led the Fed to focus on inflation, just as the risks of incoherent financial deregulation reached their peak. One source of this narrowness was the homogeneous disciplinary training of board members in macroeconomic theory.

Second, the Fed was unaware of the networked danger of rapidly accumulating risks and the corresponding growth of the completely unregulated financial networks created by its decision not to rein in racially targeted subprime lending. By 2000 these networks exceeded the size of the formal banking system; by 2007 the formal banking system had a value of \$10.5 trillion, and the shadow sector had a value of \$13 trillion.<sup>237</sup> There is persuasive evidence that the Fed did not see how its program of aggressive deregulation created opaque transactions about which even it lacked information concerning the identity of counterparties or the size and composition of various short-term financing entities.

Without this basic balance sheet information, the Fed lacked indispensable tools to assess the quantity and quality of these unseen risks. Moreover, without capital requirements, this burgeoning no-regulation zone grew without a safety net. The Fed's aggressive deregulatory approach before the crisis severely compromised its ability to monitor and control the escalating risk in the shadow market. It could not regulate or plan for the impact of an exploding bubble whose growth it had blindly stimulated through deregulation. The Fed is the only monetary, economic, and financial regulator in the world with the independent power to backstop the global financial system by creating \$12.8 trillion based solely on a vote of 14 members of the FOMC, headed by the chairman of the Federal Reserve. The paradox of the Fed's unique power is that despite its unrivalled global economic and monetary status, and because of its cognitive narrowness, it simply could not connect its decade of deregulation to the emergence of the shadow banking system and its contribution to the growing problem of economic inequality.

For a long time, the American-led transformation of the global financial system and the emergence of a deeply interconnected network of interdependent financial nodes sparked pride in a stable, prosperous US financial system. A story of American economic and financial exceptionalism prevailed, until just days after it all fell down in September 2008.

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<sup>237</sup> FOMC TRANSCRIPTS, *supra* note 188.

### III. WHAT CAN THE FED DO ABOUT INEQUALITY?

#### A. Overview

The answer to the question that drives this section, “What can the Fed Do About Inequality?” depends, in part, on your economic and political commitments.<sup>238</sup> First, the Fed must learn from its overreliance on the narrow cognitive framework of conventional macroeconomics. It must assess the opportunity to mitigate and install organizational structures to create counter dynamics to lessen the effects of groupthink.<sup>239</sup>

For some, the Federal Reserve is a non-elected political entity.<sup>240</sup> Another view is that the Fed is a largely non-political, technical manager of the routine monetary policy decisions that affect the health of our economy.<sup>241</sup>

<sup>238</sup> Arindrajit Dube & Ethan Kaplan, *Occupy Wall Street and the Political Economy of Inequality*, THE ECONOMISTS’ VOICE (2012), [http://people.umass.edu/adube/DubeKaplan\\_EV\\_OWS\\_2012.pdf](http://people.umass.edu/adube/DubeKaplan_EV_OWS_2012.pdf).

<sup>239</sup> The Dodd-Frank created Financial Stability Oversight Committee is the place where these changes should be implemented. However, the six years of FSOC show it to be intensely concerned with a new narrow program of regulatory oversight: the size of and designation of Systemically Important Institutions (SIFI’s). The size of banks and other non-bank financial institutions will certainly be important, but not to the exclusion of the factors I have identified in this article.

<sup>240</sup> This view is represented by political odd bedfellows, Sen Bernie Sanders (I- Vermont) and Ron Paul (R-Ky). Sanders objects to the bank bailouts and inequality effects of the Fed’s 2008 crisis programs. Paul and his father before him argue that the “loose monetary policy” of the Fed is the cause of boom and bust economic cycle. The Pauls’ call for a return to the gold standard. A view rejected by most economists and applauded by “political movements on the right.” Emily Cadei, *Paul, Sanders Join Forces Against Federal Reserve*, NEWSWEEK, Jan. 13, 2016, <http://www.newsweek.com/paul-sanders-join-forces-fed-414926>.

<sup>241</sup> The Federal Reserve itself adopts the non- political technocrat view of its role in the economy. The Fed describes itself to members of the public as follows:

Policymakers, academics, and other informed observers around the world have reached broad consensus that the goals of monetary policy should be established by the political authorities, but the conduct of monetary policy in pursuit of those goals should be free from political influence. Careful empirical studies support the view that central banks able to conduct day-to-day monetary policy operations free of political pressure.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, WHY IS IT IMPORTANT TO SEPARATE FEDERAL RESERVE MONETARY POLICY DECISIONS FROM POLITICAL INFLUENCE?, <https://www.federalreserve.gov/faqs/why-is-it-important-to-separate-federal-reserve-monetary-policy-decisions-from-political-influence.htm> (last visited Oct. 15, 2016).

Those who believe that Fed monetary, bank regulatory and macro-economic responsibilities are beyond politics, also subscribe to the view that the Fed has no role to play in causing or ameliorating the profoundly intertwined American problems of race and economic inequality.<sup>242</sup>

The Federal Reserve today is the product of long-running political argument that can be traced to the founding of the nation.<sup>243</sup> The founding fathers were deeply divided about the place for a central monetary authority.<sup>244</sup> Hamilton favored a strong central government institution to manage the national debt, control economic activity and establish the international creditworthiness of the new nation.<sup>245</sup> Jefferson and Madison adamantly opposed a strong central bank, on the model of the privately owned Bank of England. They feared the centralized control of the credit available to local farmers and businesses.

These two opposing original strands of the political economy of American banking persist today. 1. Central government control of the levers of economic power by northern financiers and foreign investors vs 2. Decentralized financial institutions that fed American growth in the agrarian, slave-holding South.

Fear and suspicion of an all-powerful central bank that could favor one region or political faction over another curtailed the short charters of the First Bank of the United States (1791-1811); and fueled President Jackson's populist campaign and ultimate veto of renewing the Second Bank charter (1816-1836). These political divisions gave rise to a seventy-seven-year period when there was no central bank, until 1913 when the Federal Reserve was established.<sup>246</sup>

The Fed was created as a part of a progressive agenda,<sup>247</sup> including a reaction to the Panic of 1907 and the dominance of Wall St. banking baron, J. P. Morgan's handling of the panic with a syndicate of financiers who pooled capital to serve as private "lenders of last resort." Progressives were outraged by the corruption and many conflicts of interest when a cabal of private bankers decided which trusts, and the stocks they held, would be bailed out.<sup>248</sup> The

<sup>242</sup> BRENDAN O'FLAHERTY, *THE ECONOMICS OF RACE IN THE UNITED STATES* 21 (2015).

<sup>243</sup> WILLIAM GREIDER, *SECRETS OF THE TEMPLE: HOW THE FEDERAL RESERVE RUNS THE COUNTRY* 243.

<sup>244</sup> *Id.*

<sup>245</sup> See generally RON CHERNOW, *ALEXANDER HAMILTON* (2004). Chernow's magnificent account of the first Secretary of the Treasury is reported to be the source for the always sold out hip-hop Broadway musical "Hamilton." Curt Schleier, *The Jewish Historian Behind Broadway's Hip-Hop Hit 'Hamilton'*, *THE TIMES OF ISRAEL*, Sept. 14, 2015, <http://www.timesofisrael.com/the-jewish-historian-behind-broadways-hip-hop-hit-hamilton/>.historynewsnetwork.org/article/160622.

<sup>246</sup> ALLAN H. MELTZER, *A HISTORY OF THE FEDERAL RESERVE: VOLUME I 1913-1951* (2003).

<sup>247</sup> GREIDER, *supra* note 243, at 243.

<sup>248</sup> See RON CHERNOW, *THE HOUSE OF MORGAN: AN AMERICAN BANKING DYNASTY AND THE RISE OF MODERN FINANCE*, 128 (1990). This National Book Award winner tells a

Progressive reformers succeeded in passing the progressive income tax of 1913, and the Federal Reserve act that same year. However, “the agrarian reformers were defeated, their popular movement crushed. Their political energy was first co-opted by the Democrats and then vanquished by the Republicans. The central bank that Congress eventually created in 1913 was not at all what the Populists had in mind.”<sup>249</sup>

The Fed emerged fitfully, over 95 years from a weak decentralized quasi-government entity with power in the 12 regional banks, as a political concession to the longstanding concern about the potential dominance of northeastern financiers. The dismal performance of the passive Fed that raised interest rates during the Great Depression is now legendary.<sup>250</sup>

With this political history in mind, in what follows, I portray the Fed as a political entity bearing the distinguished DNA of our national political economy of banking. I argue here that the Fed seeks to mask its political power in complex mathematical models of the economy devoid of connection to, or responsibility for any of the messy problems of American economic life such as racism, the role of bank regulation and monetary policy in distributing the wealth of the nation.<sup>251</sup>

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*B. The Fed Must Be Mandated to Develop Thick Macroeconomic and Financial Systemic Risk Models for the Growing Wealth Inequality*

The Federal Reserve conducts a triennial survey of the distribution of wealth. In 2014, Chairman Janet L. Yellen highlighted the importance of this survey of consumer finances in examining the increasing concentration of wealth

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detailed, gripping account of the life of Wall St. titan, J.P Morgan, based on exclusive access to previously private collection of Morgan’s personal papers. The chapter on the Panic of 1907 provides a definitive account of the conflicts of interest in Morgan’s handling of the panic and the political accommodation he received from President Theodore Roosevelt, despite Roosevelt’s otherwise firm commitments to Progressivism. *Id.* at 128.

<sup>249</sup> See GREIDER, *supra* note 243, at 254, for a history on the origins of the Federal Reserve.

<sup>250</sup> See *supra* Section II.A.1 for a discussion on the failures of Ben’s Fed during the Great Depression.

<sup>251</sup> PIKETTY, *supra* note 92.



at the very top of our economic distribution. Yellen sounded a clarion call to consider the deep social, economic and political impact of this unequal distribution:

It is no secret that the past few decades of widening inequality can be summed up as significant income and wealth gains for those at the very top and stagnant living standards for the majority. I think it is appropriate to ask whether this trend is compatible with values rooted in our nation's history, among them the high value Americans have traditionally placed on equality of opportunity.<sup>252</sup>

There is recent evidence that Fed Board economists are beginning to use this data to learn about the essential components of the racial and wealth disparities that drive vulnerability to market predation.<sup>253</sup> However, this preliminary descriptive investigation of racial wealth variables is a necessary, but not sufficient condition, to build more sophisticated models of both macroeconomic and systemic risk arising from the conditions of racial discrimination in housing finance markets and the historic wealth disparity between blacks and whites.

Can the Fed be expected to build more sophisticated macroeconomic or financial systemic risk models to incorporate the role of racial wealth differences in assessing the vulnerabilities to the financial system? The answer is no, at least not immediately, according to leading academic researchers, the thin models of macroeconomic mapping of the dynamics of inequality is still at a very rudimentary stage.<sup>254</sup>

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<sup>252</sup> Janet L. Yellen, Chairman, Bd. of Governors of the Fed. Reserve, Perspectives on Inequality and Opportunity from the Survey of Consumer Finances Chair Janet L. Yellen, Speech at the Conference on Economic Opportunity and Inequality, Federal Reserve Bank of Boston (Oct. 17, 2014), <http://www.federalreserve.gov/newsevents/speech/yellen20141017a.html>.

<sup>253</sup> THOMPSON, JEFFREY P. & GUSTAVO A. SUAREZ, FEDERAL RESERVE BOARD DIVISIONS OF RESEARCH & STATISTICS AND MONETARY AFFAIRS, FINANCE AND ECONOMICS DISCUSSION SERIES (2015).

<sup>254</sup> One doctoral student in economics conducted a survey of the literature on macroeconomic models of inequality. He noted that "[t]he key phrase in the academic literature is 'heterogeneous agent model', which is a catch-all for macroeconomic models whose dynamics can't be summarized by the wealth of a stand-in representative agent . . . household-level wealth heterogeneity . . . is not generally considered to be particularly important to understanding macroeconomic dynamics. A handful of interesting references employing this sort of model." Erik Madsen, Ph.D. candidate in Economic Analysis and Policy, Stanford GSB, "*Are there any macroeconomic models of inequality?*" QUORA, <https://www.quora.com/Are-there-any-macroeconomic-models-of-inequality>.

Mian and Sufi, tell us that:

The distribution of income/wealth matters a great deal for thinking about the macro-economy. Convincing some of this fact is not easy—many continue to work within a modeling framework in which all distributional considerations are assumed away, the so-called “representative-agent” framework.<sup>255</sup>

Therefore, although one might welcome a revolutionary insight from policymakers on the Board, the limitations of the field of macroeconomics will prove to be a drag on future possibilities for the necessary policy change that I call for here.

*C. The Fed Must Identify and Incorporate Social and Political Financial Patterns of Exploitation in Models of Systemic Risk*

My discussion of the history of racial discrimination in housing above supports this proposal. In addition, Nobel laureates Akerlof and Shiller argue persuasively that the nature of free markets makes predation and manipulation inevitable features of most markets<sup>256</sup> Akerlof and Shiller provide further support from the field of economics for my argument that the Fed should include these longstanding patterns of market manipulation, including racial discrimination in systemic risk models of how our economy works.

*D. The Fed Must Understand and Incorporate the Regulatory Implications of Piketty’s Insight*

According to Nobel Prize winner Paul Krugman’s review of *CAPITAL IN THE TWENTY-FIRST CENTURY*, Piketty has sparked a revolution in our understanding of long-term trends in inequality, concluding that Piketty’s work is:

A tour de force of economic modeling, an approach that integrates the analysis of economic growth with that of the distribution

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<sup>255</sup> Atif Mian & Amirand Sufi, House of Debt Blog, *Why the Income Distribution Matters for Macroeconomics*, HOUSE OF DEBT BLOG (Mar. 27, 2014), <http://houseofdebt.org/2014/03/27/why-income-distribution-matters-for-macroeconomics.html>.

<sup>256</sup> GEORGE AKERLOF & ROBERT SHILLER, *PHISHING FOR PHOOLS: THE ECONOMICS OF MANIPULATION AND DECEPTION* (2015).

of income and wealth. This is a book that will change both the way we think about society and the way we do economics.<sup>257</sup>

Piketty's intervention in economic analysis of inequality is not without critics. Krugman highlights the objections of influential University of Chicago macroeconomist Robert Lucas:

Some economists (not to mention politicians) tried to shout down any mention of inequality at all: "Of the tendencies that are harmful to sound economics, the most seductive, and in my opinion the most poisonous, is to focus on questions of distribution."<sup>258</sup>

If Krugman, but not Lucas, is right about the importance of Piketty's economic models of inequality, we must ask the Fed to engage this insight directly and fashion an intellectually defensible response.

Yale law professor David Grewal understands the connection between law, financial regulation and Piketty's insight. In his review of Piketty's scholarship, Grewal sees the legal regulatory implication of Piketty's insight. For Grewal, Piketty's insight creates an opportunity to develop an agenda exploring the legal rules that structure and enforce capitalism.<sup>259</sup>

*E. The Fed Must Have an Integrated Monitor of Household Debt Levels and Consider Systemic Risk Implications of Imprudent Levels of Such Debt*

As income and wealth inequality rise, the gap for the bottom 90% is filled with imprudent personal debt. The Financial Crisis Inquiry Commission,<sup>260</sup> Mian and Sufi,<sup>261</sup> and Raghuram G. Rajan<sup>262</sup> all make the point that consumer

<sup>257</sup> Paul Krugman, *Why We're in a New Gilded Age*, NEW YORK REVIEW OF BOOKS (May 8, 2014) (book review) (reviewing THOMAS PIKETTY, *supra* note 92) <http://www.nybooks.com/articles/2014/05/08/thomaspikettynewgildedage/>.

<sup>258</sup> *Id.*

<sup>259</sup> David Singh Grewal, *The Laws of Capitalism*, 128 HARV. L. REV. 626, 628 (2014) (book review) (asserting that PIKETTY, *supra* note 92, "prompted discussion of inequality, financial regulation, and political economy across an unusually wide spectrum"). For further valuable contributions to our understanding of capitalism as a legal order, see STEVEN A. RAMIREZ, *LAWLESS CAPITALISM: THE SUBPRIME CRISIS AND THE CASE FOR AN ECONOMIC RULE OF LAW* (2012) and Timothy A. Canova, *Financial Market Failure as a Crisis in the Rule of Law: From Market Fundamentalism to a New Keynesian Regulatory Model* 3 HARV. L. & POL'Y REV. 369 (2009).

<sup>260</sup> FINANCIAL CRISIS INQUIRY REPORT, *supra* note 9, at 83–101.

<sup>261</sup> See generally ATIF MIAN & AMIR SUFI, *HOUSE OF DEBT: HOW THEY (AND YOU) CAUSED THE GREAT RECESSION, AND HOW WE CAN PREVENT IT FROM HAPPENING AGAIN* (2014).

<sup>262</sup> See generally RAGHURAM G. RAJAN, *FAULT LINES* (2010).

debt is a canary in the coal mine for systemic risk. I am persuaded by these insights and empirical evidence. Therefore, I urge that the Fed and possibly FSOC incorporate undue expansions of consumer debt into models of financial systemic risk and macroeconomic predictions.

### CONCLUSION

“[A]lthough the financiers bear the primary responsibility for the depression, I do not think they can be *blamed* for it – implying moral censure – any more than one can blame a lion for eating a zebra. Capitalism is Darwinian.”<sup>263</sup>

- Richard Posner

*Judge for the United States Court of Appeals for the Seventh Circuit*

As I have discussed, contrary to the conventional wisdom that “the Federal Reserve does not have a role in creating or ameliorating the problem of economic inequality in America,” my analysis of the Financial Crisis of 2008 directly implicates the Fed in a central role before the crisis. The Fed’s program of radical deregulation of financial markets and new financial products set the stage for a market without fences in which the lions ate the zebras.

During the crisis the Fed’s failure to see the converging nodes of the interdependent networks of a transformed global financial system meant that it was caught unawares. It did not have a plan; it resorted to its ideological pre-commitments as the basis for distributing emergency lending worth 12.8 trillion dollars.

In this Article I do not take up the question of the Fed’s democratic accountability for this enormous control of the wealth of this nation during the crisis and for many years in the future. Among the many questions that invite my attention for future research are: the matter of democratic accountability and transparency of Federal Reserve powers; what is the meaning of the transformation of the New Deal banking safety net requiring separation of insured deposits from speculative investments, regulated capital levels to internalize and restrain risk in exchange for emergency lending to respond to banking sector panics? Have we entered a new era in which the genie of regulatory control of financial innovation and its attendant risks cannot be put back into the bottle? Is the “Bernanke Doctrine” of rescuing private financial firms without regulation or requirements for traditional cash buffers to protect taxpayers or transparent fully explanatory balance sheets now a *fait accompli*?

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<sup>263</sup> A FAILURE OF CAPITALISM, *supra* note 193, at 284 (emphasis in original).

Who is responsible for ensuring that homeownership, the centerpiece of middle- and working-class wealth potential, is financed with stable, suitable financial products that lead to eventual ownership? Transitory occupancy of homes that never yield real wealth, or the community stability associated with the pride of eventual complete ownership is a cruel economic hoax. A central role of government is to mediate the market forces that manipulate the deep longing for participation in homeownership as a fundamental marker of economic citizenship.<sup>264</sup> And the central question for extended academic and policy discussion on this issue should be: What can the Fed do about inequality?<sup>265</sup>

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<sup>264</sup> See, e.g., Franklin D. Roosevelt, 1944 State of the Union Address (Jan. 11, 1944) (“We have come to a clear realization of the fact that true individual freedom cannot exist without economic security and independence . . . We have accepted, so to speak, a second Bill of Rights under which a new basis of security and prosperity can be established for all—regardless of station, race, or creed. Among these [is] . . . [t]he right of every family to a decent home.”)

<sup>265</sup> Here, I am echoing Yellen’s own comments during her nomination hearing. See Yellen Nomination, *supra* note 1, at 4–36. “[W]e have seen a huge rise in income inequality . . . . It is not that we have not had pretty strong productivity growth for much of this time in the country. But the disproportionate share of those gains have gone to the top ten percent, and even to the top one percent. So this is an extremely difficult and, to my mind, very worrisome problem.” *Id.*